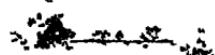


Calcutta University Commission, 1917-19

REPORT

Volume II



PART I

Analysis of Present Conditions

CHAPTERS XIV—XX



CONTENTS.

REPORT.

PART I.—ANALYSIS OF PRESENT CONDITIONS.

VOLUME II.

	PAGE
ANALYSES OF CHAPTERS XIV—XX	(ix)
CHAPTER	PAGE
XIV.—THE EDUCATION OF GIRLS AND WOMEN	1
" XV.—POST-GRADUATE TEACHING AND RESEARCH	37
" XVI.—ORIENTAL STUDIES	81
" XVII.—THE EXAMINATION SYSTEM	140
" XVIII.—THE MEDIUM OF INSTRUCTION AND EXAMINATION; AND THE TEACHING OF ENGLISH AND THE MOTHER TONGUE	226
" XIX.—CONDITIONS OF STUDENT LIFE	312
" XX.—THE SITE OF THE UNIVERSITY	368

VOLUME I.

Analyses of Chapters II—XIII.

Classified List of Colleges and Institutions belonging or affiliated to the Calcutta University.

CHAPTER	
" I.—Reference and Procedure of the Commission.	
" II.—Preliminary Observations.	
" III.—The Development of the Western System of Education in Bengal.	
" IV.—Government and Private Effort in Education in India.	
" V.—Education in Bengal.	
" VI.—The Muslims and their Educational Needs.	
" VII.—The Education of Backward Classes.	
" VIII.—The High Schools as the Foundations of the University.	
" IX.—The University Matriculation Examination. Its Requirements, Standard and Influence upon the Schools.	
" X.—The Recognition of Schools by the University.	
" XI.—The Education of Europeans and Anglo-Indians.	
" XII.—The Intermediate Classes and the Second-Grade Colleges.	
" XIII.—The 'Arts Colleges': their Undergraduate Work.	

VOLUME III.

Analyses of Chapters XXI—XXIX.

CHAPTER XXI.—The Training of Teachers.
 " XXII.—Legal Education.
 " XXIII.—Medical Education.
 " XXIV.—Engineering and Mining Education.
 " XXV.—Agricultural Education.
 " XXVI.—Training in Technology (other than Engineering, Mining, Architecture and Agriculture) and in Commerce.
 " XXVII.—Governance and Administration of the University of Calcutta.
 " XXVIII.—The Relations between Government and the University.
 " XXIX.—Inter-University Relations.

PART II.—RECOMMENDATIONS OF THE COMMISSION.

VOLUME IV.

Analyses of Chapters XXX—XXXIX.

CHAPTER XXX.—The Need for a New Departure.
 " XXXI.—Reform of Secondary Education. Proposed New Authority.
 " XXXII.—The Intermediate Colleges.
 " XXXIII.—The University of Dacca.
 " XXXIV.—A Teaching University in Calcutta.
 " XXXV.—The Mufassal Colleges.
 " XXXVI.—The Education of Women.
 " XXXVII.—The Constitution of the University of Calcutta.
 " XXXVIII.—The Site of the University.
 " XXXIX.—Improved Conditions of Student Life.

VOLUME V.

Analyses of Chapters XL—LI.

CHAPTER XL.—Examination Reform.
 " XLI.—The Medium of Instruction and Examination. The Teaching of English.
 " XLII.—Oriental Studies.
 " XLIII.—The Training of Teachers.
 " XLIV.—Medical Education.
 " XLV.—Legal Education.
 " XLVI.—Engineering, Mining and Architectural Education.
 " XLVII.—Agricultural Education.
 " XLVIII.—Training in Technology (other than Engineering, Mining, Architecture and Agriculture) and in Commerce.
 " XLIX.—The Special Educational Needs of Musalmans.
 " LI.—Relations of Government with the Universities.
 " LII.—Financial Aspects of our Proposals.
 " LIII.—Summary of Recommendations.

Notes—

A. Dr. Zia-ud-din Ahmad and Dr. J. W. Gregory.
 B. Dr. Zia-ud-din Ahmad.
 C. Dr. J. W. Gregory.

APPENDICES.

VOLUME VI.

Appendices to the Report.

- I.—Appendix to Chapter I.
Memorandum submitted by the Commission to the Subjects Committee (appointed in connexion with the Reforms).
- II.—Appendix to Chapter III.
Macaulay's Minute on Education, 1835.
- III.—Appendix to Chapter III.
Despatch from the Court of Directors of the East India Company to the Governor-General of India in Council, No. 49, dated the 19th July 1854.
- IV.—Appendix to Chapter VI.
Memorandum on the Mohsin Fund, by Dr. Zia-ud-din Ahmad.
- V.—Appendix to Chapter IX.
Note on the age of candidates at the matriculation examination of 1918 by Dr. Zia-ud-din Ahmad.
- VI.—Appendix to Chapter XI.
Memorandum on the Education of Europeans and Anglo-Indians by Mr. W. W. Hornell.
- VII.—Appendix to Chapter XIV.
Scheme for a proposed School for Hindu Girls in zananas.
- VIII.—Appendix to Chapter XV.
List of University Teachers in Post-Graduate Classes, 1918-19—
 - A. In Arts.
 - B. In Science.
- IX.—Appendix to Chapter XV.
University College of Science.
 - A. Scheme sanctioned by the Senate on the 15th February 1919 for the Governing Body.
 - B. Description of the grounds and buildings.
- X.—Appendix to Chapter XVI.
Calcutta University Regulations for the M.A. degree in Indian Vernaculars.
- XI.—Appendix to Chapter XVI.
Scheme for the reorganisation and reform of Madrassahs in the Presidency of Bengal.
 - A. Time table for the Junior Department.
 - B. Detailed course of studies for Classes VII to X.
- XII.—Appendix to Chapter XVII.
Excerpts from Calcutta University Regulations relating to Examinations.
- XIII.—Appendix to Chapter XVII.
 - A. Memorandum on Frequency Curves of the Marks of a number of sub-examiners by Dr. Zia-ud-din Ahmed and P. J. Hartog.
 - B. On the Limits of Error in the Marking of Examination Papers and certain Practical Consequences arising therefrom by Dr. Zia-ud-din Ahmad.

VOLUME VI—*contd.*

XIV.—Appendix to Chapter XVIII.
Summary of the Report of a Conference held at Simla in August 1917 on the Medium of Instruction in Secondary Schools.

XV.—Appendix to Chapter XIX.
Memorandum on the Organisation of Hostels by Dr Zia-ud-din Ahmad.

XVI.—Appendix to Chapter XXIII.
Extracts from the Rules and Regulations of the Medical College of Bengal, Calcutta.

XVII.—Appendix to Chapter XXIII.
Memorandum on a Department of Public Health by Dr. C. A. Bentley, Sanitary Commissioner with the Government of Bengal.

XVIII.—Appendix to Chapter XXIV.
Resolutions passed at recent conferences on Agricultural Education.
A. Conference held at Pusa on 4th and 5th February 1910.
B. Conference held at Simla on the 18th and 19th June 1917.
C. Conference forming part of the tenth Meeting of the Board of Agriculture in India, held at Poona from the 10th to 15th December 1917.

XIX.—Appendix to Chapter XXIV.
Memorandum by Mr. L. Birley, Secretary to the Government of Bengal, Revenue Department, Calcutta.

XX.—Appendix to Chapter XXIV.
Extract from the Proceedings of the Conference on Veterinary Education at a Meeting of the Board of Agriculture in India held at Poona, December 1917.

XXI.—Appendix to Chapter XL.
University Diploma in Spoken English.
A. Draft Regulations of the Calcutta University.
B. Memorandum submitted by the Commission on these Regulations.

XXII.—Appendix to Chapter XLVI.
Report on the health conditions of the site of the Civil Engineering College, Sibpur, by Dr. C. A. Bentley, Sanitary Commissioner with the Government of Bengal.

XXIII.—Appendix to Chapter XLVII.
Memorandum by Mr. S. Milligan, Director of Agriculture, Bengal.

XXIV.—Appendix to Chapter XLVII.
Scheme of the University of London for the Degree in Estate Management.

XXV.—Appendix to Chapter LI (and Chapter XXXII).
Financial estimate of the Intermediate Colleges.

XXVI.—Appendix to Chapter LI (and Chapter XXXIX).
Financial estimate for Hostel Accommodation.

XXVII.—Appendix to Chapter LI.
Financial Estimate for the proposed reconstruction of Calcutta University.

XXVIII.—Appendix to Chapter LI (and Chapter XXXIII).
Financial estimates for the recurring expenditure on the proposed University of Dacca with a summary list of buildings required.

VOLUME VI—*concl.*

XXIX.—Percentage of Passes at University Examinations.

XXX.—Letters inviting representatives of private colleges to confer with the Commission.

- A. Representatives of Missionary Bodies.
- B. Representatives of Private Colleges in the Mufassal.
- C. Representatives of Private Colleges in Calcutta.

XXXI.—List of witnesses.

XXXII.—List of institutions and places visited by the Commission.

XXXIII.—List of persons consulted by the Commission.

XXXIV.—Notes on the Statistical Statements printed in Volume XIII.

VOLUME VII.

General Memoranda and Oral Evidence.

- I. Agricultural Education.
- II. Commercial and Industrial Education.
- III. Engineering and Architecture.
- IV. Europeans and Anglo-Indians, University Education of.
- V. Examinations and Appointment of Examiners.
- VI. Government and Education.
- VII. Health of Students.
- VIII. Madrassahs.
- IX. Medicine.
- X. Musalmans, Special Needs of.
- XI. Post-Graduate Instruction.
- XII. Presidency College, Calcutta, Development of.
- XIII. Religious and Social Conditions, Effects of.
- XIV. Secondary Schools, Teaching and Examination of.
- XV. Serampore College, Serampore, Development of.
- XVI. Special Departments of Study.
- XVII. Teachers, Training of.
- XVIII. Teaching, Courses and Methods of.
- XIX. Trust Deeds of Colleges.
- XX. University, Organisation and Administration of.
- XXI. University Policy, Changes in.

VOLUME VIII.

Classified Replies to the Commissioners' Questions 1—3.

1. Defects of the existing system of university education.
2. Essentials of the best kind of university training.
3. Resources of Calcutta as a seat of learning.

VOLUME IX.

Classified Replies to the Commissioners' Questions 4—7.

4. Datea and mufassal universities.
5. Relation between the University and colleges.
6. University and professional requirements.
7. University courses.

VOLUME X.

Classified Replies to the Commissioners' Questions 8—12.

8. Conditions of admission to the University.
9. Use and abuse of examinations.
10. Improvements in university examinations.
11. Medium of instruction.
12. Scientific study of the vernaculars.

VOLUME XI.

Classified Replies to the Commissioners' Questions 13—16.

13. Subjects of study omitted in curricula.
14. Government and the University.
15. University examinations and public service.
16. Research in the University.

VOLUME XII.

Classified Replies to the Commissioners' Questions 17—23.

17. Conditions of student life in Bengal.
18. Health and physical development of students.
19. Organisation of residence.
20. Financial resources for higher education.
21. Removal of the University to the suburbs.
22. Special communal interests.
23. Women's education.

VOLUME XIII.

Statistics relating to colleges.

STATEMENT I, (A) AND (B).—Number of students in the session 1917-18.

- “ II.—Number of students in the session 1917-18, who have failed and are taking the course for a second or a later year.
- “ III.—Localities from which students are drawn.
- “ IV.—Number of Muslim students in the session 1917-18.
- “ V, (A) AND (B).—Residential accommodation of students in the session 1917-18.
- “ VI.—Particulars of teaching staff and teaching for the session 1917-18.
- “ VII.—Conditions of service of teaching staff in non-Government colleges.
- “ VIII.—List of publications of members of the teaching staff, 1913-17.
- “ IX, (A) AND (B).—Number of working days in the session 1917-18.
- “ X.—Periods which elapse between the first day of the session in the first and third years and the actual beginning of the teaching work for students in those years respectively.
- “ XI.—Non-university examination courses.
- “ XII.—Attendance by persons other than candidates for university examinations.

MAPS.

IN VOLUME I.—Map of Bengal showing the Sites of Colleges.
,, II.—Map of Calcutta showing the Distribution of the University Buildings
and Colleges.
,, IV.—Maps showing the Site of the Dacca University and the Town of Dacca.

ANALYSES OF CHAPTERS.

Part I.—Analysis of Present Conditions.

VOLUME II.

CHAPTER XIV.—THE EDUCATION OF GIRLS AND WOMEN.

Section I. The social importance of women's education.—(1—3) Its social significance and bearing upon men's education. (4) This has long been realised by Government. (5) Slow progress except in the elementary grade. (6) Bengal backward in this field.

Section II. The obstacles in the way of women's education.—(7—8) Early marriage and its results. (9) The *purdah* system. (10—11) The unsympathetic attitude of public opinion, illustrated by citations from our correspondents. (12—13) Trepidation about western influences on women. (14—16) Political changes must bring social changes. (17) The financial obstacle. (18) Public opinion generally distrustful of the education of girls. (19) The lack of teachers. (20) Difficulty of the position of a woman-teacher in Bengal. (21) Possibility of employing widows. (22) The special difficulty of education for Muslim women. (23) The delicacy of the problem.

Section III. Secondary education for girls.—(24) Less than one *per cent.* of the girls under instruction are in secondary schools. (25) Girls in boys' schools. (26—27) *Zanana* teaching and its difficulties. (28) The fourteen secondary schools for girls fall into two types, (29) (a) schools used by the *bhadralok*, and (30) (b) mission schools. (31—32) Both dominated by the matriculation. Failure of an attempt to lessen this domination in mission schools. (33) Absurdity of this domination. (34) Is it diminishing? (35) The matriculation course an inadequate preparation for the college course. (36) Good work of girls' schools in face of difficulties.

Section IV. The arts colleges for women.—(37) The three colleges, (38) their numbers, (39) whence their students come. (40) Their staffs. (41) Inapplicability of some of the rules of affiliation to women's colleges. (42) Evasion under cover of rule about private students. (43) Intimacy between teachers and students possible. (44—46) Should the courses for women be identical with those for men? (47) Close connexion of these colleges with schools; and (48) in two cases, with training classes. (49—51) The health and physique of women students. (55) Need for systematic study of problem.

Section V. Professional training for women.—(56) Need for women's trained service in teaching, medicine and nursing. (57) Shortage of teachers. (58) Training for the higher type of teachers. (59—60) Training for the lower type of teachers. (61) The training of widows as teachers. (62) The difficulty of procuring Muslim teachers. (63) The need for women doctors shown by the figures of infant mortality. (64) Small number of women in training for the medical profession—nearly all Christians. (65) Mixed classes and the objection to the Delhi school.

(66) The closing of the Calcutta Medical College to women. (67) Need for preliminary scientific training. (68—69) Other professional training.

Section VI. Proposals for reform.—(70—71) The present system inadequate. (72) Need of an adaptation to Indian conditions. (73) The twofold need—professional training and training for home life. (74—75) Scheme of reform proposed by Rai Lalitmohan Chatterjee Bahadur. (76—77) Criticisms and proposals of Sister Mary Victoria.

Section VII. The need for a special organisation.—(78) A separate women's university inadvisable. (79) Proposals of the Association of University Women, (80) of Sister Mary Victoria, (81) of Miss Marie Banerjee, (82) of Miss A. L. Janau. (83) Grounds for hope.

CHAPTER XV.—POST-GRADUATE TEACHING AND RESEARCH.

Section I. Period before the Indian Universities Act of 1904.—(1) Introductory. (2) Five periods of development of M.A. and M.Sc. teaching. (3) First period, 1858-64. (4) Second period, 1865-84. (5) Third period, 1885-1908. (6) Fourth period, 1909-16. (7) Proportion of B.A. and M.A. graduates during these four periods. (8) Arrangements for M.A. and M.Sc. teaching during this time in colleges—not formally affiliated for the purpose.

Section II. First period under the Indian Universities Act, 1904.—(9) Teaching function of the University under the Indian Universities Act, 1904. (10) Affiliation of the General Assembly's Institution and the Presidency College under the Act of 1904. (11) First appointment of university lecturers under the regulations of 1908 in Calcutta and in the mufassal. (12) Unsatisfactory nature of initial arrangements; rapid increase in number of students. (13—14) Causes and extent of this increasing demand for instruction. (15) Employment of assistant professors and other whole-time teachers by the University. (16) Appointment of university professors. (17) Classification of the university staff. (18) Instruction in subjects not undertaken by affiliated colleges. (19) Instruction in Sanskrit; failure of Sanskrit College to secure affiliation. (20—21) Unhappy results of the rivalry between the University and the colleges. (22—23) Affiliated colleges unable to meet the needs of increasing numbers of students. (24) M.A. and M.Sc. colleges proportionately fewer than B.A. and B.Sc. colleges.

Section III. Second period under the Indian Universities Act, 1904.—(25) Appointment of Post-Graduate Committee by the Government of India in 1916. (26) Report of the Committee and action thereon by the Government of India and the University. (27) Supersession of the affiliation system in Calcutta; institution of Councils of Post-Graduate Teaching in Arts and Science. (28) Classification of post-graduate teachers. (29) Constitution of the Councils. (30) Constitution of the Executive Committee of each Council. (31) Constitution of the Boards of Higher Studies. (32) Function of the Council. (33) Function of the Executive Committee. (34) Function of the Board of Higher Studies. (35) Proceedings of these authorities subject to successive confirmation. Position of the Syndicate and Senate. (36) Financial arrangements. (37) Examinations; internal and external examiners. (38) Appointment of teachers; approval by Government of India. (39) Power to frame rules. (40) Post-graduate teaching fund. (41) Post-graduate teaching in mufassal. (42) Introduction of the new system in 1917. (43) Attachment of post-graduate students to affiliated colleges. (44—46) Number of students and their classification during the session 1917-18. (47) University teachers—1918-19. (48) Financial arrangements, 1917-18.

Section IV. Criticism of the post-graduate scheme.—(49—53) Adverse criticism by experienced educationists. (54) Two schools of criticism. (55) Recognition of the claims of teachers to organise and supervise teaching arrangements. (56) Improvements effected under the new scheme. (57) Co-operation with colleges. (58) Extent of association of college teachers in the scheme. (59) Why such association is of a limited extent at present. (60) Residence of students on a uniform plan under new scheme. (61) Danger of conflict between post-graduate teachers and Senate. (62) Separation of post-graduate teaching from undergraduate instruction. (63) Full co-operation between the University and colleges, possible under a new synthesis. (64) New universities for the mafassal.

Section V. Research.—(65) Premchand Roychand Studentships. (66) Griffith Prize. (67) Mitra Research Medal in Indian Economics. (68) Jubilee Research Prizes. (69) Lahiri Research Fellowship in Bengali. (70) Kasimbazar Fund for Research in Indian Mathematics and Astronomy. (71) Palit and Ghose Research Scholarships; Palit Scholarship for study outside India. (72) Ph.D. and D.Sc. degrees. (73) Onaauthnath Deb Research Medals for women graduates. (74) Medical research. (75) Research in law. (76) Government research scholarships.

Section VI. The University Colleges of Science; the Palit and Ghose Trusts.—(77—80)

CHAPTER XVI.—ORIENTAL STUDIES.

Section I. Introduction.—(1) Sanskritic and other non-Islamic studies; Islamic studies; reasons for differential treatment of the two problems.

Section II. Sanskritic and other non-Islamic studies.—

A. *Outline of the history of Sanskrit studies, 1792-1823.*—(2) Foundation of the Calcutta Madrassah and the Benares Sanskrit College. (3) Friendly attitude of Government towards Hindu and Muslim culture. (4) Pursuit of Sanskrit learning in indigenous institutions or *tuls*; their improvement advocated by Lord Minto and Mr. Colebrooke. (5) Provisions of Section 43, Chapter 155. Statute 53, George III, for revival and improvement of literature of learned natives of India. (6) Influence of the great pioneers of oriental studies.

B. *The Sanskrit College, 1824-1918.*—(7) Foundation of the Calcutta Sanskrit College, originally a *tul* for study of various subjects including medicine. Development under Vidyasagar and Nyayaratna. Three departments of the institution, school, college and *tul*. (8) The Anglo-Sanskrit College—M.A. studies. (9) The Anglo-Sanskrit School—special courses in Sanskrit. (10) The *tul* department as a model institution. (11) Description of the M.A. courses in Sanskrit; necessity for collaboration of Sanskritists trained in indigenous and western methods.

C. *The Sanskrit tuls and their reorganisation, 1878-1918.*—(12) Development of indigenous learning in the *tuls*; growth of the examination system therein. (13) Introduction of the system of title examinations in 1878. Institution of new titles in 1884. Survey of *tuls* by Nyayaratna in 1891 and his report. (14) Action by Bengal Government in 1892; foundation of non-pensionable stipends for teachers in selected *tuls*; stipends for teachers and pupils on examination results. Institution of three grades of examinations. Principal of the Sanskrit College becomes Registrar of Sanskrit examinations. Dissatisfaction results from over-centralisation. (15) Memorial to Lieutenant-Governor of Bengal by Sanskritists in 1906. Conference. Establishment

of Board of Sanskrit Examinations including strong representations of orthodox pandits. Stimulus to study of Sanskrit in *tōls*. (16) Conference of 1913 after the redistribution of the provinces effected in 1912. (17) Recommendations of the Conference of 1913. (18) Foundation of the Calcutta Sanskrit Association by the Government of Bengal in 1918. A Convocation of 500 pandits as a deliberative assembly and an Executive Council of 22, the majority to be orthodox representatives of Sanskrit learning. Duties of the Association. (19) Establishment of the Bihar and Orissa Sanskrit Association in 1915. (20) Statement of problem ; is it practicable to secure university recognition for orthodox scholars trained in *tōls*? (21) Description of the courses for the three grades of examinations leading up to Sanskrit titles and their characteristic features.

D. *The study of Pali, Tibetan, Chinese, Japanese and Zend.*—(22) Provision made by the University for Pali studies for undergraduate and post-graduate students. (23) Reorganisation of Pali studies by the Board of Higher Studies in Pali. Description of the new courses. Reorganisation of the staff. Appointment of Buddhist monks from Ceylon and Burma. (24) Tibetan studies. Collection of Tibetan books in the university library. Publication of readers, grammar and dictionary. History of Indian logic from Tibetan sources. Instructor in Tibetan. Employment of a lama. (25) Chinese and Japanese studies. Readership in Buddhistic philosophy. (26) Study of Zend. Selections from Zendavesta.

E. *The study of ancient Indian history and culture.*—(27) Foundation of the Carmichael Professorship of Ancient Indian History and Culture in 1912. Institution of the M.A. degree in the subject in 1918. Description of the courses and qualifications of the staff employed.

F. *The study of Indian vernaculars.*—(28) Scientific study of Indian vernaculars. Lahiri Research Fellowship in Bengali language and literature. Description of works published by Mr. Dines Chandra Sen. (29) New scheme for the M.A. degree in Indian vernaculars. (30) Chief features of the scheme ; its elasticity and comprehensiveness. Possibility of inclusion of Urdu for the benefit of Musalmans. (31) Preparation of books of typical selections in several vernaculars. (32) Vernaculars of hill-tribes and aboriginal races.

G. *Subsidiary studies.*—(33) Study of comparative philology. Lectures on philology of the Bengali language. (34) Facilities for study of subsidiary modern languages.

Section III. *The Islamic studies.*—

A. *An outline of the history of madrassahs in Bengal from 1781 to 1907.*—(35) Purport of this section. The transfer of the *Dicani* to the East India Company and the establishment by Warren Hastings in 1781 of the Calcutta Madrassah. (36) The resumption proceedings ; the Directors' educational despatch of 1830 ; Lord Macaulay's minute ; the resolution of Lord William Bentinck's Government, 1835 ; the petition of the Calcutta Musalmans ; Act XXIX of 1837. (37) The curriculum of the Calcutta Madrassah about 1833 ; the attempt to make English compulsory. (38) The starting of Anglo-Arabic classes in 1847 and the appointment of a European principal to the Calcutta Madrassah. The recommendations of the Council of Education, 1853. (39) The despatch of 1854 contemplated the inclusion of the Calcutta Madrassah in the Calcutta University. (40) Its omission and its effect. (41) Sir Frederick Halliday calls for a report on Calcutta Madrassah ; the proposal to abolish the

Arabic department negatived by the Government of India; the Anglo-Persian department becomes a second-grade college—1807. (42) The closing of the college classes. (43) The Hooghly College and the Mohsin Fund. The establishment of new Government madrassahs. (44—46) Mr. Amir Ali's evidence before the Indian Education Commission. (47) Nawab Abdul Latif Khan's evidence. (48) The influence of Sir Syed Ahmad Khan in Upper India; Bengal contrasted with Upper India. (49) Some progress on the English side of the Calcutta Madrassah but no progress in madrassah education proper. (50) The proposals for the reform of madrassahs which were before the Government of Bengal in 1903.

B. Conference of 1907-08 and its results.—(51) The Conference. (52) Three sub-committees appointed to deal with three questions. (53) Opening of the title classes and redistribution of the classes; three stages in the course, junior, senior and title; title classes confined to the Calcutta Madrassah. (54) Description of the course for the junior classes. (55) Senior or college classes. (56) Differentiation of Sunni and Shiah students. (57) Description of the senior courses. (58) The title courses. (59) Teaching of English. (60) Standard of knowledge of English discussed. (61) Senior madrassah examination compared with university degree examination. Employment of Arabic scholar from Egypt. (62) Teaching of Urdu. (63) Appointment of teachers of Urdu as a second language. (64) Sir Andrew Fraser rejects proposal for importation of Arabic scholar from Egypt.

C. The reformed madrassah scheme.—(65) Dissatisfaction of East Bengal Musalmans with the views of the Bengal Conference of 1907. (66) Appointment of committee by the Eastern Bengal Government and its recommendations. (67) Description of the new senior course. (68) Views of Mr. H. Sharp. (69) Views of Mr. R. Nathan. (70) Redistribution of territories: announcement of intention to establish a University at Dacca arrests discussion. (71) Proposals of the Dacca University Committee regarding the department of Islamic studies. (72) Resolution of the Government of Bengal, 1915. (73) Position in 1915-16.

D. Retention of the orthodox course at the Calcutta Madrassah.—(74) Reformed course not adopted in the Calcutta Madrassah. (75) Question formulated by Government of Bengal. (76) Variety of views expressed in reply to question. (77) Views of Chittagong Conference of 1913. (78) Opinion of Shams-ul-Ulama Abu Nasr Waheed. (79) Committee for revision of Calcutta Madrassah curriculum.

E. Madrassah examinations.—(80) Central Board of Examinations for lower and higher standards. (81) Title examinations, 1912. (82) Special Islamic matriculation and intermediate examinations. (83) Number of candidates in madrassah examinations.

F. Summary of evidence before the Commission.—(84) Madrassah reform a very difficult question. (85) Memorandum of Calcutta Musalmans. (86) Maulvi Abdul Karim. (87) Maulvi Aminul Islam. (88) Complaints about the unsuitability of the courses. (89) Mr. A. H. Harley. (90) English as a compulsory subject. (91) Shams-ul-Ulama Vilayat Hussain. (92) Opinion of a deputation of Calcutta Musalmans. (93) Opinion in favour of optional study of English in the Calcutta Madrassah. (94) Opinion of a deputation of Musalmans of Bengal. (95) Opinion of Mr. Hatley. (96) Opinion of Mr. J. R. Cunningham, Director of Public Instruction, Assam. (97) Suggestions for improvement of madrassahs. (98) Suggestions by Maulvi Abdul Karim for establishment of Faculties of Oriental Studies in the Calcutta Madrassah.

(99) Different mode of recognition suggested by Calcutta Muslim deputation.
 (100) Institution of Islamic Faculties suggested. (101) General desire that the Arabic department of the Calcutta Madrasah should be brought within the sphere of the influence of the University.

G. The present position of madrasahs.—(102—113).

H. Islamic studies in the University.—(114).

CHAPTER XVII.—THE EXAMINATION SYSTEM.

Section I. Introductory.—(1) The problems of examination nowhere more urgent than in India and especially in Bengal. (2) Wide importance of those problems generally felt in Bengal. (3) General plan of the chapter. (4) Matriculation and influence of examination on schools dealt with elsewhere.

Section II. Magnitude of the examination problem.—(5) Government of India resolution of 1904. (6—8) Growth in number of candidates since 1904

Section III. Domination of the teaching system by the examination system and its results.—

A. (9—11) Domination of teaching and learning by examination in Bengal. The same condition said to prevail in other provinces. (12) Replies to the question: 'Is teaching unduly subordinated to examination?' 30 in the negative, 169 in the affirmative. (13) Replies in the negative. (14) Replies in the affirmative. (15) The Commission convinced by their own experience that teaching is almost exclusively directed to the examination syllabuses (16—17) Teachers said to be judged by authorities by their examination successes. Pressure of students on teachers to confine teaching within syllabuses. (18) This pressure due to overwhelming anxiety of students to pass examinations. (19) The anxiety due to (a) fewness of careers open in Bengal except through the examination system, and (b) poverty. (20) Comparison of relative importance for success in life of university examination systems in western countries with their corresponding importance in Bengal; caste prejudices (21—23) Poverty as a source of anxiety to pass examinations. (24) The effort of the teacher in many cases limited to the preparation and recital of notes, that of the student to memorising them. (25) Notes dictated even in M.A. classes; text-books committed to memory. (26—27) Evidence of exceptional powers of memorisation of Bengali students, as shown in the examination-room. Evidence that success can be achieved in examinations by effort of memory; 'the best student, judged by examination results, is the best memoriser'. (28—29) Distaste for learning produced by the present system. (30—31) Bad habits of thought acquired; intellectual interests sterilised. Relative smallness of contribution of Calcutta University during the past 50 years to the advancement of knowledge or to practical discovery.

B. Causes of the present situation.—(32) The evils above described not inherent in every examination system. Their causes of three kinds. (33) The lack of disinterested effort among the students. (34—37) The defects of the present system of secondary education. Difficulty arising from medium of instruction. The defects in secondary education removable.

Section IV. General functions of examinations and degrees —

A. (38) Defects due to mistakes in design of examination, and to want of appreciation of true functions of examinations and degrees. (39—40) The question as to the meaning of the degrees not asked either by the public or the University; that question ought to be asked. A university degree ought to be a guarantee given by the University in regard to each student on whom it is

conferred, the nature of the guarantee varying with the degree. (41) The guarantee simplest to understand in the case of a technical degree like that in medicine; in that case, it means that the possessor is regarded by the University as a suitable person to practise medicine, and as having a fair knowledge of the sciences on which modern medicine is based. Basis of the university guarantee analysed. (42) Nature of guarantee implied by degrees in Faculties of Arts and Science more elusive and varied than in medicine. Doubt as to what degree implies that the possessor can certainly do. (43) The answer to this question cannot give the complete connotation desired for the degree; illustration; the limitations of examinations being recognised, they should be applied rationally, and their general purpose borne in mind. (44—45) Confusions of examination system largely due to uncertainty as to their purpose. The uncertainty concealed by the apparent precision of the marking system. Difficulty of assigning an intelligible meaning to a 'percentage of marks'.

B. (46—47) Illustration from the matriculation examination in English at Calcutta University of an examination of which the purpose is defined with great precision, but which fails in its purpose through the illusion due to numerical marking. (48—49) The deficiencies of secondary schools render it difficult for Calcutta University to make good its own matriculation guarantee in respect of English; but some improvement is possible.

C. (50) Greater difficulty of judging in other subjects whether the matriculation examination is a success or a failure. Question of mathematics. (51) Task of judging success or failure of an examination impossible in the absence of any definition of the purpose of such examination.

Section V. Detailed problems of the examination system.—

A. (52) Uncertainties of purpose and of method in the present system. (53) A scientific study of the limitations and potentialities of examinations in its infancy. Evidence of Dr. Brajendranath Seal. (54) Distinction between three elements tested by examination. (55) Distinction between 'complete examinations' and 'examinations by sample'. (56) University regulation designed to differentiate between memorisation and knowledge, a failure in practice.

B. (57) The problem of 'alternative questions'? (58) Witnesses opposed to such questions. (59) Witnesses in favour. (60) Reconciliation of the two views; alternative questions justified in testing range of knowledge; but tests of capacity or of 'intelligent appreciation' should be compulsory, and determine failure or success on the whole examination. (61—62) The wide reaching effect of the latter kind of question on education. Suggestions of Mr. Stanley Leathes's Committee. Psychological tests of fitness for entrance adopted by Columbia University. (63) Suggestion that examination answers should form 'short essays.'

C. Systems of marking.— (64) The 'mechanical system of marking' described and criticised. (65—67) Examples of the mechanical system. (68) Origin of the system, a desire for equality of treatment. The equality attained illusory and misleading. (69—73) Examples of Boards of Examiners who do not follow the mechanical system. (74) Criticism of the theory that mechanical addition of marks assigned for component parts of a paper gives a right value for the paper as a whole. (75—76) Suggestion that positive marks should be allotted for special excellence and negative marks for special deficiency.

D. (77) System of 'compensation' or 'grace' marks. (78) Cases specially considered by the Syndicate. (79) Question of compensation for weakness in case of one subject by excellence in one or more other subjects. Differentiation between 'intermediate' and 'final' examinations in this matter. (80) Compensation at matriculation or 'high school' examination, and at intermediate or 'intermediate college' examination. (81) Compensation at university intermediate and at university final examinations.

E. (82—84) General question of leniency. Origin of false sentiment of pity. Views of Mr. W. C. Wordsworth. The responsibility of the examiners concealed by the marking system. Injustice done by misplaced leniency both to the public and to deserving candidates.

F. (85) The marks of examiners not checked. Investigation of marks at request of candidates on payment of a fee. Errors rectified if discovered, but fee not returned. Delays in such rectifications.

G. (86) Examination by 'compartments'. (87—88) View of Universities Commission of 1902. (89) Regulations of the Calcutta University. (90) Views of Dacca University Committee. (91—93) Views of witnesses divided. (94—96) No general solution of the question seems possible. The regulations in other Faculties should allow some latitude, like that allowed in the Faculty of Medicine.

H. (97—98) 'Reference' in one or more subjects. Views of witnesses; advocated on account of poverty of students. (99—100) Conditions under which 'reference' might be granted.

I. (101—102) Question of re-attendance at courses by students who have failed.

J. (103) Frequency of examinations. Question of hardship inflicted by a year's interval between successive examinations of the same kind. (104) Question of negotiable degrees. (105—107) Question of limitation of number of appearances at the same examination.

K. (108) Suggestions made with object of increasing thoroughness of examination tests and diminishing chance errors.

L. (109) *Viva-voce* examinations. (110) Practical examinations. (111) Library examinations. (112—114) Question of credit for course work. (115—117) Research work.

M. (118—123) Boards of Examiners. Distinction of Calcutta University between 'paper-setters' and 'examiners.' Nomenclature of this report. (124—130) Participation of teachers in examination work. (131) Question of concordance of marking of assistant examiners. (132) Fees of examiners.

N. *Classification*.—(133) Discrepancy between Calcutta and other Indian universities in use of divisions at matriculation. (134—135) Calcutta regulations; suggestions for modification. (136) Discrepancy between Calcutta University and other Indian universities in use of 'classes' at intermediate examinations. (137—140) Classification at pass and honours examinations and masters examinations.

O. (141—143) Question of anonymity of candidates. Suggested inequality of treatment of Muslim and Hindu candidates. The matriculation should be conducted anonymously, but not the examinations of a teaching university.

P. *Secrecy of examination papers*.—(144) The examination papers for the Calcutta matriculation examination, 1917, became known twice before the examination was actually held with the assistance of Government. (145) Printing of examination papers. (146) University enquiries fruitless; the Commission not

constituted for the purpose, of further enquiry into these past events. (147) Question of reasonable precautions in the future.

Q. (148) Opinion of witnesses that examinations seriously deteriorate the health of students. View of Mr. Mohini Mohan Bhattacharjee that the strain of examinations is indirectly due to want of regular work and tutorial guidance and not to difficulty of university courses. (149) Enquiry of the Government of India from local Governments. (150) Special investigation needed. (151) 'Test-examinations.' (152) Length of examinations.

R. (153) Wastage at examinations.

S. (154) Interval between conclusion of course and commencement of examination excessive. (155) Interval between conclusion of an examination and publication of results.

T. (156—157) Prescription of text-books for examinations. (158—159) Use of lectures by students as a means of preparing for examinations.

Section VI. Methods suggested for diminishing the rigidity of the examination system.—

(160—162) Replies to Question 9 (ii). (163) In a residential university like Dacca the excessive rigidity of the present system will disappear naturally: and a similar process should take place more gradually in the reconstituted University of Calcutta. (164—167) Evidence on question of provision of courses on which no examinations would be held. (168—169) Evidence that in regard to selection of subjects the present regulations are not sufficiently rigid.

Section VII. Non-collegiate students.—(170) Clauses in Act of 1904 relating to non-collegiate students. (171) Female students. Regulations relating to practical work. (172) Statistics of non-collegiate students. (173) Special regulations relating to teachers. (174) General question of re-admitting as non-collegiate students candidates who have failed. (175—179) Discussion of views of witnesses who desire to extend the non-collegiate system.

Section VIII. Concluding observations.—(180) Examinations as a 'test of character.' Their limitations in this respect. (181) Examination certificates and degrees useful as passports to careers; those passports should not be regarded as valid for an indefinite period; nor should comparative failure in examinations be regarded as a bar to recognition of good work done subsequently. (182—184) The urgent necessity for reform

CHAPTER XVIII.—THE MEDIUM OF INSTRUCTION AND EXAMINATION; AND THE TEACHING OF ENGLISH AND THE MOTHER TONGUE.

Section I. Introductory.—(1—2) The present situation in regard to the medium of instruction and examination briefly described.

Section II. Historical.—(3) The movement for 'English Education': Grant, Ram Mohan Roy, Hare. Foundation of Hindu College. (4—6) Enthusiasm for English Orientalist / Anglicist controversy. Macaulay's Minute and Lord William Bentick's resolution of 1835. The formation of a vernacular literature, the 'ultimate object' of Government policy. (7) Impulse given to vernaculars by freedom of the press and abolition of Persian as the court language. (8—10) Encouragement of the vernaculars by the Public Instruction Committee. (11—12) Despatch of 1854; deplores neglect of vernaculars; its double aim, to cultivate a bilingual school system in the first instance, and to raise vernacular schools to the level of English schools. (13—15) Foundation of University of Calcutta;

the University at first encourages, then discourages, use of vernaculars; in 1870 begins to return to first policy. (16) The Education Commission of 1882; different views as to medium held in Central Provinces and in Bengal. (17) Increased use of vernacular in Bengal high schools. (18-19) Universities Commission of 1902 condemn use of English as medium at too early an age; deplore neglect of vernacular and recommend its encouragement by the University. (20) Government of India resolution of 1901 deplores neglect of vernaculars, and premature use of English as medium; Government adheres to policy of despatch of 1854. (21) Government of India resolution of 1913 reports that children who have been through complete vernacular course are exceptionally efficient. (22-23) Motion of Mr. Rayanagar in Imperial Legislative Council in 1913 in regard to use of vernacular medium. View of Sir Harcourt Butler. Enquiry promised after the war. Speeches by H. E. Lord Chelmsford. (24) The question of medium not purely educational; the deep interest in it shown by the Bengal public.

Section III. The medium of instruction and examination above the matriculation stage.
Introductory.—(25-28) Division of opinion on this subject; The possibilities of bilingual education not dealt with by the witnesses.

Section IV. The medium of instruction and examination above the matriculation stage.
Views of Hindu and European witnesses.—(29-32) Hindu witnesses in favour of the vernacular medium. (33-35) European witnesses in favour of the vernacular medium. Present and former heads of colleges, members of the educational and administrative services. (37-47) Witnesses who desire the vernacular medium to be introduced gradually, or partially. (48-59) Hindu witnesses in favour of English as the sole medium, permanently or for some time to come. (60) European heads of colleges in favour of the English medium. (61-62) Witnesses in favour of parallel institutions or classes, the one set using the English, the other the vernacular medium.

Section V. The medium of instruction and examination above the matriculation stage.
Views of Muslim witnesses.—(63) Views of the Calcutta and Assam Muslim deputation opposed to the vernacular medium. (64) Muslim opinion divided into at least three sections. (65-67) Muslim witnesses in favour of the English medium. (68) Views of the principal of, and other persons connected with, the Calcutta Madrassah. (69) Views of Muslim witnesses in favour of the vernacular medium. (70) Views of Muslim witnesses in favour of parallel institutions or classes, the one set using the English, the other the vernacular medium. (71) Views of (a) Mr. Hydari and (b) of Mr. Abdul Karim in regard to Urdu as a medium in Bengal. (72) Views of Mr. Justice Abdur Rahim and Sir Ali Imam. (73) The Muslim views to be discussed further in Chapter XLI.

Section VI. The question of medium in Assam and Burma.—(74) Evidence of Mr. J. R. Cunningham in regard to Assam. (75) Evidence of witnesses in regard to Burma.

Section VII. Question of the medium to be used below the matriculation stage.—(76-78) Opinion of majority of witnesses in regard to standard in English required at present matriculation stage, and at present intermediate stage. Requirements in regard to vernacular should be not less than those in regard to English. Question of the fulfilment of this double aim. (79) Two irreconcilable schools of thought, even among those who desire English as the university medium. (80) The present inadequacy in English. (81-83) Extent to which English is now

used as a medium in the four higher classes of secondary schools. Conflicting evidence. The practice varies in different schools. Written English the compulsory medium at the matriculation examination. (84) Answers to Question 11 (ii) (b). (85) Witnesses in favour of English as the medium of instruction in the upper classes of secondary schools: differences of opinion as to the class in which the English medium should be first used. (86) Witnesses who would use English as the sole medium except for teaching Sanskrit and the vernaculars. (87—88) Witnesses who advocate the use of English as the medium in teaching certain subjects, of the vernacular in teaching others. Question of technical terms. (89) The case of mathematics. (90) Views of Mr. J. G. Covernton. (91) Views of Mr. H. Sharp on the progressive introduction of the English medium. (92) Views of Mr. F. C. Turner. (93—93) Views of European witnesses in favour of using the vernacular medium in secondary schools (and English at the universities): (93) Mr. J. R. Barrow; (91) Staff of Serampore College; (95) Mr. J. A. Richey; (96) Mr. C. E. W. Jones; (97) Mr. S. G. Dunn; (98) Mr. G. A. Wathen. (99) Cramming and undue memorisation attributed to premature use of English as the medium; asserted intellectual superiority of boys trained through the vernacular.

Section VIII. The teaching of English in secondary schools.—(100) The views of the Commission on the use of English as a medium in secondary schools reserved for Part II. (101) General dissatisfaction with present teaching. Grounds of this dissatisfaction. (102) The teachers of English, often ill-qualified and ill-paid. (103—104) The training of English teachers. Suggested employment of (a) Anglo-Indians, (b) women teachers. (105—106) Use of the direct method. Conflicting views. (107—109) The teaching of grammar. (109—111) Prescribed text-books for matriculation. (112) The failure of the matriculation examination in English; a reform in the examination system might favourably affect the teaching in the schools. (113) Unsatisfactory methods of lecturing on English texts.

Section IX. Practical training in English language and the study of English literature.—(114) Replies to Question 11 (ii) (d). Division of opinion. (115—116) Advocates of a working knowledge of English; support by professors of English literature. (117) Views of Mr. T. O. D. Dunn. (118) Advocates of concurrent training in English literature.

Section X. University training in English.—(119) The present position. (120) Replies of witnesses to Question 11 (ii) (f). Division of opinion. (121—126) Witnesses who think that with suitable school training, the teaching of English, except for literary students, should be unnecessary at the university stage. (127) Suggestions for university training in English of non-linguistic students.

Section XI. Various suggestions on methods of teaching English.—(128).

Section XII. Summary of the situation in regard to the teaching of English.—(129).

Section XIII. The teaching of the mother tongue. (130).

CHAPTER XIX.—CONDITIONS OF STUDENT LIFE.

Section I. Introduction.—(1—2) Influence of environment in education.

Section II. The migratory student, and his lodging while at college in Bengal.—(3—4) The migratory habits of students illustrated by college statistics. (5) Reasons for migration. (6—7) The provision of residence is partly met by the joint family system; but it is difficult to define the terms 'guardian' and 'relative.' Dangers in the laxity of the present practice.

Section III. *Steps taken to provide suitable residences for students, and supervision of them.*—(8) Social system. (9) The recommendations of the Commission of 1882 and the subsequent inquiry in 1887. (10) The work of the Oxford Mission and the Young Men's Christian Association. (11) The Universities Commission. (12) The Government of Bengal scheme in 1904. (13) The Universities Act and the new regulations. (14) Categories of residence. (15) The Students' Residence Committee. (16—17) Government and the problem; Imperial grants to hostels.

Section IV. *Description of hostels (collegiate and non-collegiate).*—(18—19) St. Paul's Cathedral Mission College. (20) Serampore. (21—22) Feathertown, Madras. (23) Eden Hindu Hostel. (24) City, Ripon, Bangalore and Vidyasagar Colleges. (25) Mussoorie hostels. (26) M. A.-O. College, Aligarh. (27) Non-collegiate hostels maintained at Calcutta and Dacca by the Oxford Mission and the Baptist Mission. Other non-collegiate hostels in Calcutta. (28) Victoria (non-collegiate) Hostel, Madras.

Section V. *Description of messes, licensed (attached or unattached) and unlicensed.*—(29) Bad conditions in many messes. (30) Difficulties arising through use of buildings designed as family residences. (31) Disapprobation of the Government of India. (32) A well managed 'attached' mess; virtually a small hostel, and increasingly permanent. (33) The 'unattached mess' generally disapproved by witnesses, but defended by some. (34—35) The unlicensed messes by far the worst; some described.

Section VI. *Difficulties of commissarial in hostels and messes.*—(36) Bad cooking arrangements in many messes, and even in some hostels. (37) Exceptions to this. (38—39) Views of experienced correspondents as to best methods of commissariat.

Section VII. *Other aspects of life in hostels and messes.*—(40) Criticism made by some correspondents of the too costly buildings and equipment of some hostels. (41) Suggestions of the Rev. T. E. T. Shore. (42—43) Conditions of life in hostels very far from being luxurious. (44) Frequent lack of facilities in messes for corporate life. (45—46) Superintendence of hostels and messes. (47—49) Collegiate hostels the best type, but advantages also in the non-collegiate.

Section VIII. *How the residence of students is supervised and controlled.*—(50) Great difficulty of securing effective supervision and control, both in Calcutta and in the mussoorie. (51) Evidence of the Rev. Hedley Sutton. (52) Four chief difficulties: (a) Vague and elastic meaning attached to 'guardianship'; (53) (b) lack of hostel accommodation; (54) (c) indefiniteness of the standard according to which guardians are 'approved'; (55) (d) pressure under which arrangements for residence are made at the beginning of the college term. (56) Question not taken by some colleges as seriously as it should be. (57) Procedure followed by the University in its attempt to secure compliance with the regulations. (58) The regulations excellent on paper, largely inoperative in fact. (59) Successful efforts of some colleges to comply with them. (60) Unattached messes impudent of supervision. (61) Responsibility for observing the regulations as to residence rests upon the colleges. (62) The disreputable alternative before those colleges which depend for profit on attracting very large number of students. (63) Embarrassing position of the University in the present *impasse*.

Section IX. *Physical condition of students.*—(64) Scope of section. Unfavourable evidence of (65) Mr. Rames Chandra Ray and others; (66) Dr. J. Henry Gray.

(67) the Rev. W. H. G. Holmes, (68) the Rev. W. E. S. Holland, (69) and others. (70) Causes of weak physical condition; (71) pressure of work before examinations; (72) unsuitable hours of study; (73) pressure of parents; (74) malaria, (75) poor nutrition.

Section X. Physical recreation.—(76) Few students play games. (77) Insufficient facilities for physical recreation. (78) Neglect of Indian games. (79) Y. M. C. A.'s Machua Bazar Street playground in Calcutta a good model for a crowded city.

Section XI. Medical supervision.—(80) The students need medical supervision, and especially (81) in the matter of eye-strain. (82) Recommendations of Drs. R. C. Ray, Segard and Gray. (83) Great value of medical inspection.

Section XII. Narrowness of training.—(84—85) The intellectual training is often narrow and mechanical. Causes: ill-advised methods of study; (86) inadequate libraries; (87) uninspiring surroundings; (88) weakness of students' activities. (89) The attitude of parents and public opinion; evidence of Dr. Wali Mohammad, (90) Sir Alfred Croft, and (91) Presidency College Enquiry Committee.

Section XIII. The sense of corporate life.—(92) The weakness of the sense of corporate obligation in the student community; (93) evidence of Mr. Jaygopal Banerjee. (94) Lack of feeling of personal attachment to the University; and (95) to the college. (96) Evidence of Mr. Zachariah. (97—98) Causes of this weakness. (99) Signs of a coming change. (100) Evidence of Dr. Brajendranath Seal.

Section XIV. Joylessness of student life.—(101) The joylessness of student life is due largely to (102) poverty. (103) Evidence of the Rev. Garfield Williams. (104—105) The lack of healthy amusement. Frequent despondency.

Section XV. The weakening of older restraints.—(106—108) Divergence of opinion as to results, but (109—116) general agreement that the old order has been shaken. (117—118) Some correspondents deplore these changes; and (119—120) others welcome them. (121—123) Evidence of Mr. Pramathanath Tarkabhusan and Mr. Ramendra Sunder Trivedi.

Section XVI. The character of the student.—(124—125) Good characteristics of the student; evidence of Sir J. C. Bose and Sir Asutesh Chaudhuri, but (126—127) the students' obedience is passive rather than active. (128) Existence of grave moral and (129—130) political disorders. (131) Students' strikes and (132—134) their significance.

Section XVII. Religious training and observance.—(135—136) Effects of separation from good home traditions combined with a superficial education are calculated to create shallow scepticism. (137) Some signs of desire for more religious training. (138—141) Signs of a growing spirit of sacrifice and service to the Nation.

CHAPTER XX.—THE SITE OF THE UNIVERSITY.

(1) Proposals to remove the University in order to promote its corporate life and secure improved physical and moral conditions. (2—8) The existing site has advantages and many university and scientific institutions are grouped around it. (9) Answers to questions on this matter were nearly equally divided. (10—21) Opinions as to removal. (22) Argument based on cost of residential accommodation in Calcutta. (23—25) Proposals for partial removal of the

University. (26—32) Opinions against removal. (33) The cost of removal regarded as prohibitive. (34) Proposed development of College Square as the university quarter. (35—36) Expectations that the development of municipal colleges would relieve the pressure on Calcutta and reduce the advantages expected from removal, and that a new university would arise in the city if the University were transferred.

PART I

Analysis
—of—

Present
Conditions

(continued)



CHAPTER XIV.

THE EDUCATION OF GIRLS AND WOMEN.

I.—*The social importance of women's education.*

1. "Education is essentially a question of social reform And in education, I would give the first place to the education of girls. The education of a single girl means the uplifting of a whole family in a larger sense than the education of a single man." These sentences, spoken by Mr. Natarajan, Editor of the *Indian Social Reformer*, in his presidential address at the Bombay Provincial Social Conference in 1918,¹ do not over-estimate the importance of women's education, especially during a period of social transformation like that through which Bengal is now passing.

2. We have elsewhere² dwelt upon the uncertainty of aim and the conflict of emotions into which many an educated Bengali is drawn by the fact that the world of thought to which he has been introduced by western education is a thing wholly apart from the traditions, the thoughts and the modes of life still cultivated in his home. This disparity, this dislocation of two aspects of his life, has often the most unhappy effects ; and we should be justified in tracing to it many of the deficiencies and failures of the educational system. But this dualism of Bengali life is to be attributed primarily to the fact that the women, who make the home and shape the thoughts of the rising generation, have as a rule no share in the intellectual life of their men, and stand for ideals and modes of thought which are often sharply in conflict with those which their men have learned to entertain. "We do not want," says Mr. Rabindra Mohan Dutta,³ "that women in India should continue to labour under the darkness of ignorance and superstition, or cling unreasonably to fossilised remains of the past, out of which every semblance of life has vanished, and thus be always in con-

¹ Supplement to the *Indian Social Reformer*, (Bombay, 1918), page 10.

² Chapter V, especially paras. 42-46.

³ Question 23.

tinual conflict and disagreement with their educated husbands, brothers or sons."

3. It is not, therefore, as an isolated problem that we have to consider the education of women. It has the most profound influence upon the whole texture of national life, and the whole movement of national thought; and, until some working solution is found for this problem, it must remain impossible to bring the education of men into a sound and healthy condition.

4. The importance of women's education, both for its own sake and because of its vital bearing upon the intellectual development of the people, has long been recognised by the British Government and its agents. As long ago as 1849 Mr. Drinkwater Bethune, a member of the Executive Council of the Government of India, founded the premier institution of Bengal for the higher education of women, which still bears his name. He devoted to its management an infinity of pains—"I have been here almost every morning since the school opened," he said, at a meeting of celebration. And the hope that Indian enthusiasm would come to his support, as it had come to the support of the introduction of western education for boys, seemed to be justified when in 1851 Raja Dakshina Ranjan Mukherji made a gift of a plot of land in Cornwallis Square, on which the present building of Bethune College was erected. In the great educational despatch of 1854 the Directors of the East India Company wrote that the importance of female education in India could not be over-rated, and that they had observed with pleasure the evidence then being afforded of an increased desire on the part of many Indians to give a good education to their daughters. "By this means," they went on—anticipating the far-seeing statement of Mr. Natarajan, with which we opened this chapter—"a far greater proportional impulse is imparted to the educational and moral tone of the people than by the education of men."

5. But the advance which began thus promisingly was disappointing; and in the despatch of 1859¹ the Secretary of State had to deplore the small progress which had been made in the education of Indian girls and women, 'despite missionary exertions,' on which it has always largely depended. A comparison of the gross figures at wide intervals of time seems, indeed, to show very

¹ Despatch of 7th April 1859, paras. 25-31.

considerable progress. In 1854 there were 288 schools for girls in Bengal, with 6,869 pupils. In 1882¹ there were over 1,000 schools with 41,349 pupils. In 1917² there were 9,520 schools, with 286,000 pupils. These are large increases; and significantly enough, in recent years the increase has been most marked among the girls of the Muslim population.³ But the number of girls under instruction still bears a very small proportion to the total number of girls of school-going⁴ age. And, what is still more remarkable, the education of girls is for the most part limited to primary schools and the elementary classes of secondary schools. Over 98.3 per cent. of the girls in Bengal schools in 1917 were in the primary stage; and (leaving aside the European and Anglo-Indian community) there were, out of a total female population of over 22,000,000, only 491 girls in what is known as the 'high stage,' i.e., the four top classes of the ordinary high school. From these alone, of course, could come the recruits for university training. It is not surprising that the total number of students in women's colleges of university rank⁵ was, in the same year, only 144.⁵

6. What these figures mean is that, as the result of sixty years' work since Drinkwater Bethune opened his school, while the number of girls who receive a tincture of elementary education (commonly of the most mechanical and perfunctory kind) has very substantially increased, the number of girls who achieve any considerable progress, or advance far enough to be able to sympathise with or understand the work and thoughts of their husbands and brothers, is quite infinitesimal. And what is yet more striking is that such progress as has been made in the post-elementary training of girls is almost wholly due to Government or to the missionaries. Of the fourteen high schools in Bengal for Indian girls, four are Government institutions, seven are conducted by missionary bodies, and only three—two of which, though aided by Government, are far from efficient—owe their existence to private enterprise. In the sphere

¹ Indian Education Commission's Report, para. 599.

² Progress of Education in Bengal, 1912-13 to 1916-17. Fifth Quinquennial Review by W. W. Hornell (Calcutta, 1918), para. 131.

³ Between 1912 and 1917 the number of Muslim girls under instruction rose from 56,176 to 131,380; the number of Hindu girls from 129,065 to 146,221.

⁴ About 1 in 11, on the basis of the assumption that children of school-going age form 15 per cent. of the population.

⁵ In the next year it rose to 170.

of girls' education there is no parallel at all to that extraordinary activity of private enterprise which has established hundreds of high schools for boys. And in this respect Bengal, which prides itself upon being educationally the most advanced of the Indian provinces, falls far behind Bombay : in the city of Bombay alone there are ten private high schools for girls. Bengal is, in short, making no serious effort to provide good education for girls ; and but for the efforts of Government and of the missionaries, there would be practically no provision for their needs.

II.—The obstacles in the way of women's education.

7. The explanation of this backwardness, in a population otherwise so eager to develop and to use facilities for education, is to be found in the social conditions of the country, and in the restrictions by which the life and activities of women are still surrounded.

8. In the first place, girls in Bengal, as throughout India, marry very young. The custom of early marriage, as Miss Eleanor McDougall points out,¹—

“discourages a father from spending money which might be used as a dowry on his daughter's education, removes promising girls from school just at the age when their independent mental life is beginning, cuts off the supply of women teachers at the root, [and] prevents the growth of a sense of vocation and professional enthusiasm in young women teachers.”

The age of marriage is, indeed, slowly rising, especially in the more educated circles of respectable Hindu society, and in this lies one of the best hopes of future progress ; but, except among the members of the Brahmo-Samaj and the Christian community, it is still too low to make it possible that a girl should have had a good education before she marries. One of the forces already at work, and likely to become more potent, in the removal of this disability is the growing preference of young men for educated wives, whom they are often willing to accept with a smaller dowry. But the change is slow.

9. In the second place, all orthodox Bengali women of the higher classes, whether Hindu or Muslim, pass at an early age behind the *purdah*, and spend the rest of their lives in the complete seclusion of their homes, and under the control of the eldest woman of the house.

hold. This seclusion is more strict among the Musalmans than among the Hindus. But it is more strict among the Hindus of Bengal than among the Hindus of some other provinces, notably Bombay, where *purdah* scarcely exists. A few westernised women have emancipated themselves. But they are to be found almost exclusively, in Calcutta, and they are regarded by most of their country-women as ~~internationalised~~. If education is to reach the women of Bengal, either it must penetrate the *zanana*, or the *purdah* must be rent. The former is a very difficult process, because, as a rule, only women can enter the *zanana*, and the women sufficiently educated to be useful teachers are very few—too few even to staff the existing schools adequately—and they can command correspondingly high salaries. On the other hand, any sudden rending of the *purdah* would produce (if it were imaginable) such a dislocation of Bengali society as would throw into the shade all the changes which the western education of men has brought about.

10. A third grave obstacle is to be found in the attitude of the elder women, whose power in Indian households, especially over the younger women, is very great. Having lived their lives behind the *purdah*, they are naturally very conservative, and unwilling that the younger women should differ from themselves. And their sentiment is very commonly supported by the men, even by those who have passed through the whole course of western education. They fear the upturning of the old order of Indian society, and the possible destruction of some beautiful and winning aspects of women's part in that order to which we have referred in an earlier chapter.¹

"The *zanana* system and early marriage," says Sir Gooloo Dass Banerjee,² "are institutions which create difficulties in the way of the higher education (as ordinarily understood) of women. But they serve useful purposes in their own way, and, rightly regulated, they have their fair side, and help a higher training, spiritual if not intellectual, which has made the Hindu wife and the Hindu mother, 'when pain and anguish wring the brow,' the 'ministering angels' that they have been."

11. Still more decisively negative is Mr. Brajalal Chakravarti,³ the founder of the Hindu Academy, Daulatpur,³ which represents

¹ Chapter V.

² Question 23.

³ Chapter XIII., para. 131

an attempt to combine Hindu traditions with western knowledge in the education of men.

"Women occupy a peculiar position in the domestic and social life of the Hindus," he writes, "and the traditions of the family are kept up mainly by them. It is strictly enjoined in the religious books of the Hindus that females should not be allowed to come under any influence outside that of the family. For this reason, no system of school and college education can be made to suit their requirements..... Women get sufficient moral and practical training in the household, and that is far more important than the type of education our schools can give."

12. Western education for women is therefore distrusted by many, because it is felt to have an unsettling influence, which may be even more dangerous in the case of women than of men.

"It is not wise," writes Mr. Haridas Goswamy,¹ "to implant in girls, by means of education, tastes which they would not have an opportunity to gratify in their after-life, and thus sow the seeds of future discontent and discord..... This indiscriminate imparting of high western education to our girls has had the unfortunate result of unsexing our educated women, and of denationalising them—a result bad enough in the case of boys, but infinitely worse in the case of the future mothers."

13. This distrust of the effects of western education upon girls is intensified by a dislike of some of the more recent aspects of the emancipation of women in the West: some among our correspondents fear that the schools might lead to a reproduction of these features in India. Thus Mr. Rabindra Mohan Dutta,¹ whom we have already quoted on the dangers of undue conservatism, writes as follows:—

"We do not want that women in India should be steadily Anglicised, importing into our peaceful homes the evils of suffragetism, or the spirit of revolutionary and rationalistic iconoclasm, condemning all our ancient institutions that are the outcome of a long past, and are part of our flesh and blood, as it were."

In the same vein, Dr. S. K. Sen places "the undesirable examples set by their senior sisters" and "the question of women's suffrage" among the obstacles which check the progress of women's education.

14. These correspondents do not seem to realise that the demand of women for political rights in western countries is not due to though it has been facilitated by, the improved education of women: there have been periods in western history when women, in important circles of society, were just as well educated as men, without

any such results. The modern women's movement in all western countries, which has gone far in Britain only because Britain is politically further advanced than most other countries, is the inevitable consequence of the political ideas which have been adopted in western lands during the last hundred years. Sooner or later, in every country which adopts these ideas, the question of the position and rights of women must inevitably be raised ; for in every land which has accepted them, these ideas have brought about a gradual, and sometimes a sudden and violent, social transformation.

15. It is not, therefore, by merely denying an efficient education to women that great social changes can be averted. They may be delayed by such means, though perhaps only at the cost of a widening gulf between the thoughts and aims of men and women. But social changes, which must ultimately be of a far-reaching character, could only be prevented by shutting the door (if that were possible) against the political theories and methods of the West. The process of change must be painful. It cannot be made in one sphere of life, the political, without ultimately affecting all the rest ; and if it is to be carried out without giving rise to the most tragic of domestic understandings, it can only be by giving to women that degree of education which will enable them, in partnership with their men, gradually and healthily to adjust the conditions of Indian life to the needs of a new age.

16. It is thus a profound and an extremely difficult problem which is involved in the education of women ; and there is every reason to respect the hesitancy which many of our correspondents feel. They find themselves, in fact, forced into a dilemma. For themselves, they have accepted the ideas of the West, more or less fully. Many of them are even eager to give practical expression in the institutions of India to those political ideas and systems of the West which have, wherever they have been adopted, been the provoking cause of a radical transformation, often painful, in the whole social order. Yet they long to be able to say to the tide of advancing change, when it approaches the *purdah*, "thus far and no further." But this is not a permanently defensible attitude. The only solution must be a resolute attempt to achieve a real synthesis, not in women's education alone, between the ideas and traditions of the West and the ancient and rooted ideas and

traditions of India. But this reconciliation of eastern and western ideas cannot be limited to a single sphere.

17. The apprehension of a disturbance of the social order if western education is extended to girls is reinforced by another consideration. Financial pressure upon the middle classes of Bengal is in these days very severe. The boys have to be educated; that is a social necessity. But in the case of girls the social necessity is that they should be married, and a suitable bridegroom can only be obtained by the payment of a substantial dowry. To spend money on the education of girls may mean, on the one hand, the stinting of their own dowries, and, on the other, the stinting of their brothers' equipment for life. It is probably a very widespread feeling which finds expression in an answer by Rai Hari Nath Ghosh, Bahadur¹—

“People naturally prefer to educate their boys, well knowing that in future they will make them happy and comfortable in their old age, and glorify their family, whilst the girls after marriage will be at the mercy of others.”

18. In short, for a variety of reasons, some good and some less good, but mostly of a kind which must arouse sympathy, because they spring from a real mental conflict, from a genuine attachment to an old and fine tradition, and a sincere and not unfounded apprehension of the results of sudden change, public opinion in Bengal, while wholeheartedly in favour of the education of boys, is generally distrustful of the education of girls. There has probably never been a fuller or more many-sided expression of educated Bengali opinion than is contained in the answers to our questionnaire: and a survey of the answers to Question 23 should suffice to show that, however great the enthusiasm of the educated men of Bengal for a rapid expansion and improvement of facilities for men's education, there are but few of them who show great zeal for a similar development in women's education.

19. Even if the social difficulties which we have described could be overcome, and even if public opinion in Bengal could be converted to a belief in the value of a great expansion of facilities for women's education, there is a further obstacle—itself a product of the rest—which must make progress extremely slow and toilsome. This

is the extreme difficulty of obtaining an adequate supply of women teachers, upon whom, especially under such conditions as we have described, the education of all but the few westernised women must be wholly dependent. When there are less than 500 girls who even reach the top classes of the high school, and less than fifty who even attain to the intermediate stage in a year, what prospect can there be of supplying teachers for 22,000,000 ? In 1918 there were only 156 women in all the training institutions for women teachers, at every grade, and 92 of these were Indian Christians.

"It is notoriously difficult," notes the author of the Quinquennial Review of Education in Eastern Bengal and Assam for 1906-07 to 1911-12, "to induce Indian women of good position, other than Christians and Brahmos, to undergo training for the teaching profession; and even of those who are trained and pronounced fit for employment, the majority refuse to go to places where they are wanted. Moreover, owing to popular prejudices, single women are, as a general rule, unable to manage schools successfully, while married women are seldom allowed to take part in educational work."

20. Nor is it surprising that those difficulties should be felt, for the lot of the women-teacher in Bengal is made extraordinarily hard by the prejudices which environ her.

"Peculiar difficulties and dangers surround the young women who in loneliness set out to teach in a mufassal school," writes one who has studied the problem with the closest attention and the deepest sympathy. "Such women, however innocent and careful, are the victims of the vilest intrigues and accusations. The fact has to be faced that until Bengali men generally learn the rudiments of respect and chivalry towards women who are not living in *zananas*, anything like a service of women teachers will be impossible."

We have been assured that unless the women teachers in the mufassal are provided with protected residences, and enabled to have elderly and near relations living with them,¹ "it is more than useless, it is almost cruel, to encourage women to become teachers."

21. The lack of women teachers seems, therefore, to be all but insuperable except as the result of a great social change. Some two years ago the Government of India consulted local Governments on the education of girls. All the local Governments agreed that until more women teachers were available, real progress was out of the question. But all were compelled to recognise that the

¹ Thus Mr. Ramananda Chatterjee notes (Question 23) that "unmarried women of the *bhadralok* class in our country require a female companion or attendant, or a male relative, to live with them when working away from home, which is not the case with single male teachers;" and on this ground he urges that women teachers should be paid at a higher rate than men.

difficulties of obtaining them, created by the Indian social system, were extremely great. One source of supply, indeed, seems to be offered by one of the distinctive features of the Hindu social system itself. Since Hindu girls marry very young, large numbers of them are left as girl-widows. Their re-marriage is practically prohibited; from the date of the death of their boy-husbands, they return to their homes there to remain until they die, able to look forward to nothing but a long life of domestic service under the control of the elder women of the joint family. For them the work of teaching might seem to offer a useful occupation, which would give some satisfaction to their baffled maternal instinct, as well as an escape from the position of humiliation to which they are sentenced for life. In Bombay much has been done to train young widows for this kind of work; something also has been done in Bengal, as we shall see. But the Hindus, and the Bengalis more than most, are extremely jealous of the honour of their widowed daughters, and exceedingly suspicious of anything which takes them away from the immediate supervision of the elder women of the house. "As things are now," says the sympathetic observer whom we have already quoted, "it is seldom fair to ask a Hindu widow to work in a school, especially if the school is not quite close to her home."

22. If the difficulties are great in the case of the Hindus, they are yet greater in the case of the Musalmans,¹ with whom *purdah* is not, as with the Hindus, merely a social usage not observed in all districts, but is regarded by many as a religious injunction. Muslim girls of any social position are almost invariably secluded very early, whether married or not. We have already noted the great increase in the number of Muslim girls undergoing instruction which has taken place during the last few years. But these are almost all in primary schools, and in a large proportion of cases their instruction is confined to the chanting of the Quran in Arabic without any attempt to understand it. Apart from the education given in the village primary schools to girls of the lower social classes, it appears that the education of Muslim girls, secluded as they are, has "practically come to a dead stop, owing to the lack of Muslim women teachers" who can be admitted within the *purdah*.

¹ Some further information about the education of Muslim girls will be found in Chapter VI, paras. 49-54.

23. In face of all these obstacles, it is not surprising that the higher education of girls and women in Bengal is on a very modest scale; and the smallness of the results which we shall have to describe in the following sections is the inevitable result of the social conditions existing in Bengal. These social conditions are changing; but as yet they are changing very slowly. The fundamental problem of women's education in Bengal is to discover how that enlightenment of women which is necessary for the well-being of a swiftly changing society can be brought about without any sudden and disastrous dislocation of the social structure.

III.—Secondary education for girls.

24. The provision of elementary education for girls lies beyond our purview, and this exonerates us from considering the needs and treatment of more than 99 *per cent.* of the girls under instruction. We are concerned only with secondary training, and with that only as a preparation for university courses.

25. A certain number of little girls (320 in 1916-17) attend boys' secondary schools. But they are only to be found in the most junior classes, undergoing elementary instruction, and therefore do not affect our problem. The prejudice among Bengali parents against sending their girls to mixed schools is overwhelmingly strong, even among the *raiyats* of the villages. There is practically no possibility of development along the lines of co-education; and no solution of the problem is to be found in this direction.

26. For many years past Government have endeavoured to overcome the obstacles to women's education by sending teachers into the *zananas*. Instruction of this type is provided in two forms—in central gatherings of *purdah* women, and by house-to-house visitation. The former method, which is obviously cheaper and more effective, is possible among Hindus, but not, as yet, among Mosalmans. In 1917 there were in Western Bengal¹ 719 married women and girls receiving instruction of this kind provided by Government, in addition to what was provided by the missionary agencies; and there were 598 in Eastern Bengal.² But this is a mere drop in the ocean. The system, so far as it goes, is a very

¹ The Presidency and Burdwan divisions.

² The Dacca, Chittagong and Rajshahi divisions.

great boon to *purdah* women, Hindu and Muslim alike, and is highly appreciated by them.¹

27. But, apart from its small scale, it is encompassed with difficulties. The greatest of these is, of course, the difficulty of finding teachers. "The women now employed, with the exception of one or two, have the most meagre education," says Miss Bose, the Chief Inspectress for Western Bengal;² and Miss Irons,³ the Chief Inspectress for Eastern Bengal, adds that they require careful supervision and frequent inspection. The second great difficulty of *zanana* teaching is that it is (if of good quality) necessarily expensive. This is especially the case among the Musalmans, who require individual teaching. The difficulty of cost seems to be disregarded in the memorial submitted to us by the Musalmans of Berhampur,⁴ in which they urge, in general terms, "that lady teachers be appointed to teach Muhammadan girls under the house-to-house visitation system." But in any case, work of this kind, though the pupils are married women, commonly of secondary-school age or older, cannot in any true sense be called secondary education. It certainly does not lead to higher education, though Mr. Provash Chunder Mitter⁵ suggests that the University ought to 'prescribe standardised examinations' for these classes. We cannot but feel that this would be to carry the mania for examinations to strange lengths.

28. It is, then, only in the high schools specifically organised for girls that we must look for any preparation for higher education. These, as we have already seen, number fourteen. They contain just under 2,000 girls. But of these less than one-fourth were, in 1917, included in the four 'high' classes of the high-school course, which normally cover the years from 12-14 to 16-18. There were also 214 Indian girls attending schools primarily designed for Europeans and Anglo-Indians;⁶ perhaps one-fourth of these

¹ See the report of Miss Bose, Chief Inspectress of Western Bengal, printed in the Fifth Quinquennial Review of the Progress of Education in Bengal, para. 513.

² Fifth Quinquennial Review of the Progress of Education in Bengal, para. 513.

³ *Ibid.*

⁴ General Memoranda, page 208.

⁵ Question 23.

⁶ See Mr. Hornell's Memorandum on European Schools, para. 8, printed in the Volume of Appendices to this report.

were in the 'high' stage. Such is the miserable total of Bengali girls who are receiving anything like a systematic education.

29. Broadly speaking, there are two types of high-schools for girls. The first includes all those high schools to which the Hindu *bhadralok* (including the members of the Brahmo Samaj) send their daughters. Of this group the Bethune School, Calcutta, the Diocesan Collegiate School, Calcutta, the Loretto School, Calcutta, the Brahmo Girls' School, Calcutta, and the Eden High School, Dacca, are the best examples. The great majority of the pupils even in these schools leave before they reach the 'high' stage; but it is from these schools mainly that the university colleges draw their students.

30. To the second type belong most of the mission high schools. They are essentially central institutions for the educational work of the missions, and they teach mainly the daughters of their Christian converts. These come commonly from villages, and the great majority of them belong to the lowest grades of society. When they grow up, they will have to go out into a hostile world and there support themselves. Education is therefore a vital necessity for them; but there are but few of them who could profit by a university course, and many of them are incapable of taking full advantage of a high school course. Yet from among them come a very large proportion of those who undergo training as teachers: this training being chiefly provided by the missionaries. Without them, indeed, the problem of the supply of teachers for girls would be insoluble.

31. The outstanding feature of the high schools for girls, of both types, is that they are organised on the same plan as the boys' schools, and, like them, are dominated by the matriculation examination. In the case of the schools of the second type described above, it has been realised that the matriculation courses are unsuitable, especially as few, if any, of those who follow these courses will ever enter upon a university course even if they pass the examination. To meet this difficulty it was recently arranged, in the case of three mission schools, that they should concentrate all their matriculation pupils in one centre, and provide for the rest of their pupils a course more in accordance with their needs: a similar arrange-

ment, attempted by two other schools, broke down. But the experiment does not seem to have been successful.

"The people of Bengal," says Miss Bose,¹ in reviewing the situation, "seem to appreciate the matriculation certificate more than any useful, practical course of studies, and the girls set their hearts on passing the matriculation and do not yet realise the usefulness of the other standard of work. They are dissatisfied with the new ideas, and the authorities of the schools complain that they are fast losing their pupils."

32. It appears, therefore, that this tender plant of women's education in Bengal has to struggle against yet another difficulty; like the education of boys, it tends to be dominated by an examination standard, and by an examination standard that is not determined in any degree by the needs of the girl-pupils. Yet it is natural that the girls should wish to have their work attested in the only way recognised by the public; natural also perhaps, that their parents should expect them, if they break through convention so far as to aim at a good education, to prove themselves in the only recognised way. Some of those among our correspondents who are most anxious to see an expansion of girls' education, appear to define their ambitions almost wholly in terms of the matriculation, and to desire only that as many girls as possible should be enabled to pass this examination; for that is what education means to most people in Bengal. Thus Mr. Umes Chandra Haldar² urges that the age of admission to matriculation should be lowered by a special privilege for *purdahnashin* women, in order that they may pass this examination before marrying at the age of 14-16. This privilege is not to be extended to Brahmos or Christian girls, because they do not marry so young.

33. If the influence of the matriculation fetish is marked in the case of the humbler type of girls' secondary schools, in the other schools its domination is even more complete. The tragic absurdity of this situation will be appreciated if it is remembered that the examination is designed to test the fitness of students, and primarily of boys, to attend university classes. Even in the most progressive girls' schools only a small percentage of the pupils can stay long enough at school to reach the matriculation stage; and only a small proportion of those who pass the examination proceed

¹ Fifth Quinquennial Review of the Progress of Education in Bengal, para. 473.

² Question 23.

to college. That is to say, the character of the education given to the few girls who go to high schools is dictated by an examination which ignores their peculiar needs and the kind of life most of them will lead, and omits some of what ought to be the essential elements in their short and precious period of training; an examination which they will probably never attempt, and which, if they were to pass it, would only admit them to courses that they have no prospect of following.

"I regard the matriculation course as unsuitable for girls," says Mr. H. Sharp.¹ "In some respects it is difficult for them, in others it is defective. I am not in favour of a mainly 'domestic' course for girls' schools, though special institutions might usefully be opened in such subjects. But I should be in favour of giving a more womanly tendency to the course."

34. We do not wonder at Mr. Sharp's judgment. We wonder only that it is not more widely expressed by our correspondents. But we heard a more hopeful view from Sister Mary Victoria, for the influence of whose character and work at the Diocesan School and College we conceived, when we visited these institutions, the warmest admiration. She speaks with intimate knowledge of the attitude of the best circles of Hindu society in Calcutta; and she assured us, in her oral evidence,² that the number of girls in the Diocesan Collegiate School whose parents wanted them to have a liberal education, and did not care about examinations, is rapidly increasing; and that, so far as girls are concerned, "the examination ideal is dying out among the most cultured Bengalis." But she spoke in terms of unsparing condemnation of the present state of the girls' high schools.

"The condition of the high schools for girls is very unsatisfactory. Many of the high schools are of so low a standard that it would be better if they became upper primary schools. The course of a secondary school is also unsuitable for girls. This is due to the domination of the matriculation, which has a harmful effect on girls' school education, and especially on the ordinary mission high school for girls, whose pupils are often of a very poor calibre."

35. Finally there is a general consensus among those of our witnesses who have the most direct and intimate experience of the problems of girls' education that the matriculation course, besides being in itself unsuitable for girls, does not fit those who follow

¹ Question 23.

² Printed at the end of answers to Question 23.

it for the work which they will be expected to do when they pass to college classes. We need not labour this point, since it has been already dealt with in more general terms in an earlier chapter.¹ But it is at least significant that none of the condemnations of the existing system to which we have earlier referred are more definite, more precise or more conclusive than those of Sister Mary Victoria of the Diocesan College, Miss Janau of the Bethune College and Miss Sorabji of the Eden High School, Dacca.² Sister Mary Victoria has elsewhere³ gone so far as to say that it was impossible to lecture to the students of the college, and that it would continue to be so until the work at school was made more thorough, so that students when they come to college might be able to read and understand books, might be inspired with a higher conception of what student life should be, and might have some understanding of what private study is, and some capacity for concentrating their attention on the work they had in hand.

36. Secondary education for girls thus labours under exceptional difficulties in Bengal ; it is surrounded by prejudices ; it is distorted, even more unnaturally than the education of boys, by the malign influence of the examination fetish ; it provides, as yet, a very insufficient foundation upon which to raise the superstructure of a system of higher and professional education. Yet it would be unjust to leave this theme without recording our admiration for the devoted work which is being done, in face of all these difficulties, by a number of able and self-sacrificing women. In the few good girls' schools there is to be found in the teaching a combination of devotion and ability such as is rarely found elsewhere.

IV.—The arts colleges for women.

37. There are three 'arts colleges' for women in Bengal; all situated in Calcutta : the Bethune College, which rests upon the foundations laid by Drinkwater Bethune in 1849, and is a Government institution, with a staff of teachers in the educational services ; the Diocesan College, an Anglican missionary institution, conducted by the Clewer Sisterhood ; and Loreto House, a Roman Catholic missionary institution conducted by the Loreto Sisterhood. The

¹ Chapter IX.

² See their answers to Question 8.

³ Fifth Quinquennial Review of the Progress of Education in Bengal, para. 464.

first two are affiliated up to the B.A. standard, the third only up to the intermediate standard.

38. Numerically these three colleges are the smallest in Bengal, with the exception of the second-grade college at Hetampur, which had in 1917-18 nine students fewer than the Bethune College, but more than the Diocesan and Loreto Colleges. Bethune College had, in 1917-18, 89 students, of whom 61 were in the intermediate stage; the Diocesan College 68 students, of whom 43 were in the intermediate stage; Loreto House 22 students, all in the intermediate stage. Thus of the total number of 179 women university students in Bengal, no less than 126 were in the intermediate or higher secondary stage. Only 53 women in all Bengal were doing true university work.

39. The source of origin of these students is worth analysing, as an evidence of the distribution of a desire for women's education; and the figures supplied to us by the colleges¹ give us the necessary materials. Of the total of 179 students, 61, or just over one-third, come from the city of Calcutta and 24-Parganas, 40 come from Eastern Bengal²—eighteen of these from Dacca—24 from Western Bengal,³ and 6 from Northern Bengal.⁴ Seventeen of the twenty-six districts of Bengal are represented. But no less than 52 students, or not far short of one-third of the total, come from other provinces—eighteen each from Assam and Bihar.

40. One broad distinction between the three colleges is that while Bethune College has only eight Calcutta students on its rolls, and draws students from every part of Bengal, the two missionary colleges devote themselves largely to Calcutta, nearly half of the students at the Diocesan College, and all those at Loreto House, coming from Calcutta homes. Another distinction is that Bethune College is mainly staffed by men (all Bengalis); of its staff of ten seven are men, the other being an English lady principal and two Bengali lady lecturers. The two missionary colleges, on the other hand, are mainly staffed by women. The Diocesan College has six women graduates of British universities and two Bengali women graduates; Loreto House has three members of the teaching sister-

¹ Statement III, Volume XIII.

² Dacca and Chittagong divisions.

³ Presidency and Burdwan divisions.

⁴ Rajshahi division.

hood and two laywomen, all graduates. In this regard it is manifest that the missionary colleges have a great advantage over Bethune College, especially in view of the strong Indian prejudice against the free contact of men with women.

"No college in England," says Miss Janau,¹ Principal of Bethune College, "would have such a preponderance of men on its staff; and here in India the conditions even more clearly indicate the necessity of women on the staff, if there is to be any of that intercourse between staff and students which is an essential feature of college life, and which nothing can replace."

41. In spite of the peculiar and difficult position of women's education, these three colleges are subjected to the ordinary rules of affiliation. There must be a distinct teacher for each subject in which affiliation is granted and in which, therefore, students may present themselves as candidates for examination. This means that, in practice, each college must be self-contained; and since it is out of the question to maintain a large staff for such small numbers of students, the consequence is that the range of subjects which may be covered is seriously restricted. It might be possible for three colleges, situated as these are in the same town, to co-operate in the provision of larger and more varied facilities, in spite of the difficulty which the social customs of Bengal impose upon the movement of women about the streets of a city; and this possibility should be held in view if any new colleges are founded. But at present no serious attempt at organised co-operation is made; and in the result three institutions duplicate the work of teaching in the chief subjects, when they might, by combination, offer far greater advantages to their pupils.

42. There is, however, a way of getting round these restrictions upon the range of subjects of study. With the aim of facilitating higher education among women, the University has given permission to women to present themselves in any subject of the intermediate examination (except in those science subjects in which laboratory instruction is required) without presenting certificates of having attended recognised courses of study. Originally intended to meet the needs of *bona fide* private students—that is, of girls or women who may be in a position to study at home, but cannot join a college—this provision has been used as a means of enabling college students to present themselves for examination in subjects in which their

¹ Fifth Quinquennial Review of the Progress of Education in Bengal, para. 445.

college is not empowered to provide teaching. They are sent forward as 'private' students; and hence the statistics of the number of private women students are apt to be misleading.

43. Of the curricula of studies pursued in these colleges we need say little, for they are identical with those of the men, and open to the same criticisms. In one respect, however, the women's colleges have greatly the advantage. Thanks to the small size of their classes, an intimacy of personal relationship and a real tutorial guidance are possible, especially when the teacher is a woman: the whole body of women students in Bengal, at all stages, are scarcely more numerous than a single intermediate class for men in one of the big mass colleges. The small scale of women's education has at least this compensating advantage.

44. As to whether it is desirable that women students should, especially in the conditions existing in Bengal, pursue courses of study identical with those for men, there is room for considerable variety of opinion. We agree with the Association of University Women in India¹ that "it is not desirable that a lower standard should be required of women than of men in any department of study;" and this view is shared by a large number of our correspondents. But when they go on to assert that "in regard to professions equally open to men and women . . . the standard of work *and the curriculum*² should be the same," while we agree in regard to the standard of work, we cannot but feel that it might well be advisable that the woman teacher, and even the woman doctor, while following the main lines of the necessary curriculum, should be encouraged to give special emphasis to particular branches of their subjects which need not be so important for men.

45. In the same way, so long as the standards of attainment are maintained at an equal level with those exacted from men, we can see no reason against, and every reason in favour of, an adaptation of the degree courses in arts and science which would include some subjects of special value for women, and perhaps omit others of which they do not stand so much in need. Many of our correspondents urge the desirability of a specially designed curriculum for women students, or at least of the inclusion of alternative subjects adapted to the needs of women. Mrs. A. B.

¹ Question 23.

² The italics are ours.

Johnston¹ goes so far as to recommend the establishment of a special degree course, extending over four years, in 'domestic science and the home arts,' and she works out the scheme of the course in considerable detail. On the other hand, Miss Eleanor McDougall² urges that—

"domestic training should not be given at the University. If the present simplicity of Indian domestic life is to be preserved, there is no value in elaborate instruction in the preparation of food, laundry-work, dress-making, etc. Simple lessons in hygiene, sick-nursing and the care of children are exceedingly valuable; but these should be given at school. The great need of Indian women is to acquire habits of systematic, clear and persevering thought, and to gain a greater acquaintance with the facts of history and science. The present university courses are fairly well adapted for these purposes, and no material change in them on behalf of women should be attempted for another ten years at least."

46. But the prevailing opinion of those of our correspondents who have touched upon this subject, so far as it can be inferred from their rather vague answers, does not go so far as either the view of Mrs. Johnston on the one hand, or that of Miss McDougall on the other. Few are yet ready to contemplate a specialised course in domestic subjects, such as has been carried into effect by the University of London; and perhaps the conditions of Indian life would, as Miss McDougall has suggested, render such a course not altogether desirable. On the other hand, very many urge that special alternatives should be offered for women, for example, that "child psychology should be given as an alternative to logic or science at the intermediate stage,"³ or that music should be admitted as an optional subject. Sister Mary Victoria³ has known girls with a real talent for music who gave it up when they came to college, because there was no time for it. These are points upon which, since we are all men, and most of us have no intimate acquaintance with the needs of women in Bengal, we have no right to pronounce an authoritative judgment. But it seems to us manifest that they are points which ought to be seriously considered by a body competent to deal with them. On the face of it, it would appear that a problem so difficult as that of the higher education of women cannot be solved merely by applying to them a system designed for men, and far from satisfactory even for them.

¹ Question 23.

² Answer of Mr. Murshy Dhar Banerjee to Question 23.

³ Fifth Quinquennial Review of the Progress of Education in Bengal, para. 464.

47. There is one further feature of the three women's colleges which ought not to pass without notice. All three are much more intimately connected with the schools from which they have sprung than is the case with the men's colleges. They are housed in the same buildings, or groups of buildings, as the schools, and are under the same direction. Inadvisable in the case of men's colleges, this arrangement seems to us to be eminently desirable where such small numbers have to be dealt with as is the case in the women's colleges; especially as two-thirds even of the college students are doing what is essentially higher secondary school work, and there are only 53 students in the three colleges taken together who are attempting real university work. In so preliminary and experimental a stage as that through which women's education is now passing, it is all to the good that the whole process of training should be treated as a unity.

48. In the two missionary colleges training classes for teachers are carried on alongside the ordinary degree work; and Mr. W. C. Wordsworth¹ urges that this should be done in the Bethune College also. These classes are on a very small scale: in the Diocesan College, which prepares students for the degree in teaching of Calcutta University, as well as for the 'licence', there were, in 1918, only eight students in these classes, and at Loreto House which prepares for the licence alone, only two. The numbers are regrettably small. But it is altogether a good thing that this work should be carried on in close association with degree work. It is, curiously enough, only in the women's colleges that this very desirable combination is practised. It might well be carried further; if the degree courses themselves were made, in some of their forms, more directly preparatory for teaching work, they would acquire a new significance and reality.

49. One of the aspects of women's education which distresses some of our correspondents is its effect upon the health and physique of the students. Miss Janau, Principal of the Bethune College, makes a statement² on this point which gives ground for perturbation.

"The women students of the Bethune College," she reports, "the fact that every year of college life makes them weaker."

¹ Question 23.

² Bethune College, 20th March 1919.

their opinion a girl studying for the matriculation is stronger than a girl in any subsequent year at college. From what I have so far noticed, I think there is only too much truth in their estimation of the physical strength of the girl undergraduate. Such a state of things compares so unfavourably with the healthy, happy, strong women undergraduates of western lands that some immediate change is necessary."

50. Sister Mary Victoria supports this view. She attributes this unhappy state of things to the overstrain which results from examination pressure, and the attempt to cope with studies for which the students are quite inadequately prepared. But she finds other reasons also.¹

"Students are very difficult to manage in the hostel. They will not eat sufficient food In spite of the new conditions of life, they insist, in some cases, on taking only that food to which they have been accustomed in the *zamana* life. The conditions have altered, the diet must be altered. They dislike exercise, and take it only under compulsion. They will not go into the fresh air, if they can avoid doing so. They will not take sufficient rest unless compelled. They will evade the rules, and work in the middle of the night, if they can get the opportunity."

51. The education of school and college under present conditions is new to the women of India; and they have not yet adapted to the new conditions physical habits which were formed in response to an entirely different environment. And the examination machine of Bengal tells on them with yet worse effects than on the boys.

"The hustle of the examinations," say the men-teachers of Bethune College,² "which is only a hard necessity in the case of our boys, is good neither for genuine culture nor for physical health. The strain on health that it involves is recognised to be too much in the case of many boys, and there can be no excuse for gratuitously exposing the future motherhood of the country to this wasting influence."

Dr. Bidhan Chandra Ray² writes even more bitterly.

"If the effects of the examination system on boys be to produce men who may be good or indifferent machines for earning money, though dwarfed in intellect and wrecked in health, these are necessary evils. The girl, on the other hand, with her finer susceptibilities and more delicate constitution, comes out very badly indeed. I would propose that no formal and rigid examination be instituted for them."

¹ Fifth Quinquennial Review of the Progress of Education in Bengal, para. 521.

² Question 23.

52. The result of the system, under existing conditions, is indeed unhappy. This is Sister Mary Victoria's¹ description of the average woman student.

"The average student is very weak. She needs good food, exercise, and often remedial gymnastics. The chest is contracted, and the spine often curved. She has never been drilled. She has no desire for games. She cannot sit well, or walk freely. She comes to us with an impaired appetite and with an inherited dislike to eat anything but rice, vegetables and sweets."

It is not fair to attribute these results wholly to the malign influence of the system of education, or to the pressure of examination. They are the product of the mode of life natural to the *zamana*; but they are intensified under the influence of an unhealthy educational system.

53. Miss Janau suggests,² as remedies for these evils, "wider opportunities for outdoor exercise, wider opportunities for intellectual intercourse with mature minds, and a syllabus and a method of examination which makes study a pleasure and an ever-increasing delight, as we find it in western lands." The best of the colleges and schools have made efforts to meet the first, at any rate, of these requirements; but most of the high schools have not even a playground. And more is needed than organised games.

"We want the authority of a recognised medical officer," says Sister Mary Victoria,³ "to compel the student to take those remedies which will help her to grow into a woman. Especially do we need the help of a physical exercise expert. The conditions of India are trying; our space is limited; with difficulty we arrange for drilling. We must use the time we have to the very best advantage. We cannot afford the time for incompetent teaching."

54. But alas! even these reforms are rendered difficult by prejudice, if not in the colleges, whose students come from the more progressive families, at any rate in most of the schools. —The Inspectress for Eastern Bengal reported recently that it was very difficult to introduce physical training into the girls' schools owing to 'the strong objections of the parents'.

"The Hindu father," says one observer, "is prone to complain that he does not want his daughter turned into a *naruchi* girl. She has to be married into one of a limited number of families; and there is always a chance of one of the old ladies exclaiming, 'This girl has been taught to kick her legs about in public. Surely such a shameless one is not to be brought into our house!'"

¹ Fifth Quinquennial Review of the Progress of Education in Bengal, para. 521.

² Question 18.

³ Fifth Quinquennial Review of the Progress of Education in Bengal, paras. 523-24.

It is, indeed, only among the orthodox that this kind of objection is taken. But the orthodox are the majority.

55. The more closely we examine the conditions under which the higher education of women has to be carried on in Bengal, the greater appear the difficulties which surround it, the greater the courage demanded from the pioneers—for they are still pioneers—who venture upon it, the greater the need for wise guidance and careful thought, the greater the folly of easy generalisations and sweeping panaceas. But there is none of the educational needs of Bengal more urgent than a serious and systematic study of this vast and fundamental problem.

V.—Professional training for women.

56. There are two professions for which, in Bengal more than in other countries, highly trained women are desperately needed: the teaching profession and the medical profession. To these might well be added the profession of nursing, the most womanly of all occupations, for which recruits are now obtained with the greatest difficulty, practically from among the European and Anglo-Indian communities alone. Indian social usages forbid women to render these high and needed services, which only they can render, elsewhere than in their own homes; or to obtain the training which would enable them to render these services efficiently, even in their own homes.

57. Of the grave need for women teachers, and the extreme difficulty of obtaining them, we have already¹ spoken. Women teachers of two types are required; first, teachers capable of doing high school work, and of teaching through the medium of English; secondly, teachers for the primary schools and the lower classes of secondary schools. Both need a high degree of training, but Bengal has to put up with what her social system permits her to have.

58. The only training at present provided for teachers of the first class is that afforded by the training classes, already referred to, in the two missionary colleges in Calcutta. Taken together they have produced, during the last five years, an average of seven trained teachers *per annum*. In February 1914 a scheme was drawn up for the establishment of a Government training college for women

¹ Paras. 10 22 above.

in Calcutta ; it was to include two departments, for the two classes of teachers enumerated above. The scheme was held up by the war, but it has not been abandoned. It may be permissible to suggest that the creation of a new special institution, affording teaching in the subjects of school-study, which are also the subjects of university study, seems to be wasteful : the utilisation of the classes organised for very small numbers at Bethune College would surely be in every way advisable. But this subject will be more fully discussed in later chapters.¹

59. For the training of teachers of the second type described above there exist two Government institutions, and seven aided missionary institutions. Taken together they contained, in 1917, 123 students, of whom no less than 92 were Indian Christians, 29 were Hindus (including Brahmos), one was a Musalman, and one a Buddhist. The very remarkable preponderance of Indian Christians is due to two facts ; first that the missionary training institutions are designed primarily (though not exclusively) to serve the Christian community, and to train teachers for the missionary schools ; secondly, that the principles and social usages of the Christian community permit their women to render this kind of service to their fellows. It would, in fact, be impossible to maintain the girls' schools of Bengal on even their present modest footing, but for the teachers drawn from the Indian Christian community. Of the teachers of this type now in training 85—more than two-thirds—are in the missionary institutions, the most important of which are the United Missionary Training College at Ballygunj (Calcutta), and the Church of England Zanana Mission Training School at Krishnagar in Nadia—the district of Bengal where Indian Christians are most numerous.

60. Of the two Government institutions, the most active is the training class attached to the Eden High School at Dacca, which has produced, during the last five years, an average of nine trained teachers *per annum*. But the equipment of these, as of the teachers trained in the missionary institutions, is very slight. The qualification for admission to the highest of the three departments into which the Dacca classes are divided is the matriculation certificate or attendance at the whole or a part of the high school course. The great majority of the women teachers in Bengal have not even had

a High school teaching, and to speak of a university teacher, it is plainly desirable that teacher is a widow, or at any rate, never in the love of man; and, by a logic, should at least have had a higher secondary education, that is, should have attained a corresponding to the present intermediate level. But this may to be, under existing conditions, almost impossible.

61. The second of the difficulties is that there is the Hindu Widows' Training Class at Calcutta, which had in 1913 80 students. This is in one way the most promising of all the institutions, as though the young widow of the Hindu community form the only and reliable source of recruitment for the teaching profession, rather than the Christian and Hindu communities upon which it now has to draw. The influence of Western Bengal is particularly that the educated Hindu girls in that part of the Presidency is bound up with the welfare of this institution. It is in fact surprising that the Hindus of Bengal, unlike their brothers in Bombay, have as yet taken no independent steps to encourage young widow to fit themselves for the noble and useful life of a teacher. Government also take action. Yet an institution for Hindu widow, run by Hindus, would have a better chance than a Government institution of overcoming the prejudice which hamper this very necessary development, and it would be assured of aid from public funds.

62. The difficulty of providing Muslim women teachers has hitherto been found insuperable. A scheme for establishing a training class for Muslim women teachers in Calcutta under strictly *purdah* conditions was recently worked out and submitted to Government, but the war delayed it. But here also, Government action alone will not suffice. The Muslim community must itself tackle the problem, and aid in its solution. It is not enough to pass resolutions to the effect that Government ought to provide teachers to carry instruction from *zanana* to *zanana* unless some help is forthcoming in solving the at present insoluble problem of finding the teachers.

63. The second great profession for which women results are desperately needed is the medical profession; since only women doctors can render the services needed in the *zananas*. How grave this need is may be sufficiently shown by a consideration of the terrible figures of infant mortality in Bengal. Since registration is in some districts notoriously inaccurate and incomplete, and is

nowhere full and precise, exact figures cannot be obtained. But, making allowance for this, Dr. Bentley, Sanitary Commissioner in Bengal, states that "it may safely be assumed that at least 250 per thousand, or one out of every four children born in Bengal, die during the first year of life." The corresponding figure for England and Wales in 1916 was 91 per thousand. "Of the infants dying under one year of age," Dr. Bentley continues, "150 to 175 per thousand succumb during the first month of life. The corresponding figure for England and Wales in 1916 was 36.90 per thousand." The causes of this terrible infant mortality are numerous. But among them must certainly be counted the general ignorance, in the *zananas*, of the rules of hygiene and the care of babies, and the difficulty of affording proper medical attention to the women of the *zana*. The former cause might to some extent be met by educational means—if there were teachers. The latter can only be satisfactorily met by the training of women as doctors.

64. We do not here propose to discuss the provision of medical training, which is dealt with elsewhere.¹ But the extent to which it is utilised by women ought to be noted. In 1917 there were only 33 women studying in the Medical College and in the non-university medical schools of the Presidency. This number is wholly inadequate to meet the need. Of the 33, nineteen were Europeans or Anglo-Indians, eleven were Indian Christians, three were Hindus (members of the Brahmo Samaj are returned as Hindus) and none were Musalmans. For the service of healing among women, even more than for the service of teaching, Bengal is thus dependent upon the small Christian community.

65. The difficulty of obtaining women recruits for the medical profession among the Hindus and the Musalmans must obviously be greater than the difficulty of obtaining recruits for the teaching profession, especially if the training has to be obtained in mixed classes. For though there has been practically no difficulty or unpleasantness in the mixed classes of the Calcutta Medical College, it must be remembered that the women students attending these classes are practically all Christians or Brahmos. It was to meet this difficulty that the Lady Hardinge Medical School for Women was established in Delhi. But Bengali women do not willingly contemplate so long a journey. Moreover, they do not easily

¹ Chapters XXIII and XLIV.

accept the variations of social usage and diet which differentiate one Indian province from another.

66. Some of our correspondents¹ protest with vigour against the proposal, which has, we understand, since been abandoned, to exclude women from the classes at the Calcutta Medical College, which cannot accommodate all the qualified men who apply for admission. We agree that any restriction upon the facilities which exist for the training of medical women would be unfortunate. But we feel that all the existing arrangements are little better than makeshifts, and that until Hindu and Musalman society has materially modified its attitude on the training of women, no real solution for this problem will be possible.

67. One obstacle, however, could in the meanwhile be removed. One of the difficulties in the way of the woman who wishes to enter upon a medical career is that she finds it impossible to obtain the requisite preliminary training in scientific subjects ; and from this point of view there is much to be said for the suggestion of Sir Nilratan Sircar² that "I. Sc. classes in physics, chemistry, botany and geology should at once be started at the Bethune College." But when it is remembered how few are the students in this college, nearly all of whom need and desire arts rather than science training, and how costly would be the provision of complete equipment for the teaching of all these subjects for two or three students, it may well be doubted whether such an expenditure would be justified. The more we explore the needs of women students, whether working for degree courses, preparing for the teaching profession, or seeking the preliminary knowledge necessary for admission to medical training, the more obvious it becomes that what is needed is concentration of resources and of effort.

68. Of training for other careers besides teaching and medicine we have little to say ; for practically no provision is made. Some excellent work is being done in training women to make lace, to weave and to embroider in some of the missionary centres, especially in the admirable school of the Church of Scotland Mission at Kalimpong. But this kind of work lies without our province. There is a total lack of provision for the training of educated women for other callings than those named. "We need science and technical mis-

¹ See especially the answers of Miss A. L. Japau and Sir Nilratan Sircar to Question 23.

² Question 23.

tresses, art mistresses, music mistresses," says Sister Mary Victoria,¹ " but there are no opportunities for qualification ; however well-trained a girl may be she cannot command a position, because of the lack of official qualification." Sister Mary Victoria accordingly urges that, while " the majority of women should pass through good secondary schools," up to the age of 16—18, it should be possible for them " to begin the special study of housewifery, music or the fine arts in the secondary school ;" and that there should then be special schools to which they could go for further study. She advocates, in particular, (a) a technological college, (b) a department of the Government School of Art, open to women only, (c) more schools of music, and (d) a school of embroidery and needlework.

69. This is an admirable programme. But the foundations must be laid before the superstructure is erected. And in the meanwhile the two great obstacles to an intelligent system of training for women which may enable them to play the part that only they can play in the life of an organised modern society have yet to be overcome : the social customs and the social prejudices which, to many, make the whole idea of women's education abhorrent ; and the mechanical and sterilising domination of the schools and colleges by a system of inappropriate examinations, which goes far to ruin the work of even those few who have succeeded in overcoming the social obstacles.

VI.—*Proposals for reform.*

70. The education of women in Bengal cannot remain in its present condition. It is insufficient in scale to meet the needs of a progressive society, which demands the service of educated women as well as of educated men. It reproduces all the faults of the system of training for men, and that in a sphere wherein they are more destructive. Above all, it tends to be out of touch with the traditions and needs of Indian society, and thus, instead of playing its part in the gradual and healthful reconstruction of that society, it arouses vague but real alarm, and leads to reaction. In all the series of answers to our questions there is none which betrays more uneasiness, more hesitation and uncertainty of aim, than the answers to Question 23, in which we asked how (if at all) our corres-

¹ Question 23.

pondents would modify their suggestions, given in response to earlier questions, in respect of the needs of women.

71. Some of our correspondents are indeed content to advocate the extension to women of the system devised for men. Mr. Ramananda Chatterjee,¹ for example, adopts as his own a passage of Huxley :—

“ I don’t see how we are to make any permanent advance while one-half of the race is sunk, as nine-tenths of women are, in mere ignorant parsonese superstitions : and to show you that my ideas are practical, I have fully made up my mind, if I can carry out my plans, to give my daughters the same training in physical science as their brother will get If other people would do the like, the next generation would see women fit to be the companions of men in all their pursuits.”

72. But even Mr. Chatterjee, trenchant reformer as he is, makes certain minor, and very sane, qualifications. Others of our correspondents, as we have seen, are wholly opposed to any considerable development of education, at any rate of the western pattern, for women. But the majority feel that, while something, which they cannot very clearly define, ought to be done to close the growing gulf between the interests and sentiments of men and women, the existing system will not do, and that, in some way which few are able at all clearly to describe, there must be an adaptation of it to the traditions and modes of Indian life, if any substantial progress is to be made. What they do not always see is, that such an adaptation cannot be effected by a mere edict of Government, on which it is too readily assumed that all responsibility must lie ; but that there must be serious co-operation, and perhaps also sacrifice, on the part of Indian social leaders, if this great advance—the greatest perhaps, of all the advances which India needs—is to be made without a sudden and painful disruption of old and sacred obligations.

“ Remember,” said Sir John Woodroffe,² whose sympathy with and knowledge of Indian thought and life are deep and real, “ remember that all civilisations work on woman as one of their main pivots We must all move on, and with the vital current of our age, or we shall be left stranded high and dry on the banks, to wither and die If you will not give women your education, others than yourselves will give theirs. I would ask you, one and all, to do what you can to defer the year of marriage and so to extend the years of education, and to make that education real.”

What is needed is, not lip-service to the education of women, and not mere denunciation of what has been already done, but the

¹ Question 23

² Modern Review, July 1917.

real co-operation of educated men in finding the true method. One answer to our question,¹ "what are the difficulties which affect the higher education of women in India," was given by Mr. Pratapcandra Ghosa in six words: 'the paucity of highly educated men.' Such an answer has to be made impossible.

73. There are two distinct problems to be considered: the education of those girls, at present few in number, but needed for the service of the commonwealth in far greater abundance, who will devote themselves to a profession; and the education of the many who will never go out into the world. On the first question we have already dwelt sufficiently. There are defects, and grave defects, in the existing system; but on the whole, in its main features it is capable of being adapted to the needs of those girls who are willing to serve their fellows in professional callings, and of those who, coming from the more progressive sections of society, desire a university training purely for the purposes of culture. But there remains the problem, as yet unsolved, of dealing with the mass of women whose lives will be spent in the *zanana*. *Zanana* classes² and house-to-house visitation may do something; but they can never be effective until there is an adequate number of competent teachers, and some at least of these must be drawn from the circle which are unwilling to make the plunge into the full western system of school and college.

74. We have received two constructive proposals of so much interest and value, bearing upon this problem, that we feel they ought to be quoted at some length. Rai Lalitmehan Chatterjee Bahadur,¹ Principal of the Jagannath College, Dacca, writes as follows, mainly with a view to the needs of Hindu girls:—

"My idea of a college and school for Indian girls is briefly as follows:—A large garden, with four or five houses, not very big, home-like, and after the modern Indian fashion, more or less. The houses should be big enough to accommodate altogether, say, a hundred girls. No separate college or school building is necessary. Each house should have one or two sitting-rooms, which would serve for class-rooms when required. Only a small range of laboratories, simply furnished, would have to be added. There should be no more *purdah* in the school and college than there is in ordinary Indian (Hindu)

¹ Question 23.

² How much a system of instruction for *purdah* women may achieve, if approached in the right spirit, is finely described in the appendix to Miss Cornelius Sorabji's charming little book, *The Purdahnashin*, which should be read by all who wish to understand the Indian woman, her ideals and her needs.

homes now-a-days. Cooking (so far as caste rules permit), keeping the house in order, nursing, entertaining guests, keeping accounts, looking after the garden, supervising sanitary arrangements—everything should be done by the girls by turns, under the watchful eyes of each house-mistress. The house-mistress should be an elderly Hindu widow of a respectable family, not necessarily one of the teachers, nor even a graduate. The teachers should, preferably, be women, but competent women-teachers are few. There is no harm in having men-teachers just to come for the lectures..... Women visitors and male relations of the boarders up to the age of ten should be free to come and go. There should be fixed hours for lectures, which should be few. In other matters, the girls should enjoy the freedom of home."

75. Mr. Chatterjee goes on to sketch the course of study, including music, painting, needlework, hygiene and sanitation, besides the ordinary subjects; he urges that the medium of teaching should be Bengali,¹ but would include in the course English literature, English history and training in English conversation. He would make the course extend from the age of nine to sixteen.

"During this period," he adds, "there should be no university examination. There should be one at the end, answering, in some respects, to the intermediate examination, but different and more varied in range. Girls who only seek general culture and mental training would stop at this stage. Those who want to go further should read for the ordinary B.A. examination of the University, and there should be a separate college for them, consisting only of the third and fourth year classes. Attached to the college² should be classes for adult women, the relations of the girl students and others..... In this way the girls of the school would remain in close touch with elderly women which is desirable; and the training of the school will come to be understood and appreciated in Hindu households which is more than can be said now. I have consulted some of my orthodox colleagues, and they assure me that there is nothing in the scheme I have sketched which strict Hindus will not accept if they at all favour the education of women."

76. This is a solid and valuable contribution to the problem of finding a means of educating girls which will not involve an abrupt breach with, but will have some chance of commanding the sympathy of, those who have been bred in the old ways. Sister Mary Victoria, whom we have so often quoted, makes proposals which are entirely in sympathy with those of Mr. Chatterjee.

"We need schools to provide for the education of the great middle class section of the Hindu community. I will call this school for the present the *zazana* school, for it should train girls to live the *zazana* life.

¹ Many correspondents lay stress on the importance of using the vernacular as the medium of instruction for girls. See Chapter XVIII.

² Mr. Chatterjee apparently means the school, not the degree college referred to in the previous sentence.

Hindu gentlemen distrust the present schools for many reasons. Some of these reasons are :—

- (i) The primary school brings their daughters into contact with the riff-raff of the streets ; the manners of the girls become very bad.
- (ii) The instruction given is worthless in their eyes ; this instruction may be comprehended under the headings, elementary reading, writing and arithmetic. The Bengali language is taught by vernacular mistresses of the lower sections of society, and is as different from the Bengali of the girls' parents as the English of the Board School at home from the English of the educated and cultured classes.
- (iii) The education of the high school meets the needs more nearly, but there the girl is associated with girls whose parents are westernised and progressive ; the ideals are different, the outlook on life different. A girl going to such a school may, afterwards find the *zanana* surroundings irksome and restrictive ; the whole life will be unsettled and the peace of the home destroyed. I do not think it extraordinary that, under these circumstances, the roll of girls under instruction in school does not increase.

We need much this new type of school : a school which will protect the *hedges* of Hindu social life, not break them down, planting nothing in the place of that which is destroyed : a school where the best Hindu ideals of womanhood are studied and taught. I think that western educationalists hardly realise how beautiful many of these ideals are, and how far some of the ideals of modern education fall short of them."

77. Approached in the spirit of the two passages which we have quoted, the education of that major section of Hindu womanhood to whom schools of the present pattern must long remain closed ceases to appear insoluble. It is, indeed, of the Hindu girl that Mr. Chatterjee and Sister Mary Victoria are thinking. The problem of the Muslim girl is in many ways more difficult ; yet for her also some adaptation of the kind of system which they advocate ought not to be impracticable. But it is unreasonable to expect a Government, however sympathetic, to work out in detail a scheme which involves so much tact and so much understanding of social conditions. Plainly, if the kind of solution of the problem which our correspondents recommend is to be attempted with any prospect of success, there is need for some special organisation to deal with it.

VII.—The need for a special organisation.

78. As a means of dealing with the problems of women's education, especially in its higher stages, many of our correspondents recognise that some separate and special organisation is required.

Some, like Mr. Jnanchandra Ghosh,¹ Mr. Haridas Bhattacharyya¹ and Rai Mahendra Chandra Mitra Bahadur,¹ advocate the establishment of a separate university for women; but this project obtains little support. Indeed, the small number of women students would destine such a proposal to failure and there are other arguments against it, one of which is referred to by Mr. Sharp—

“ Though it will probably be long before women’s colleges can play any large part in the common social life of a university, there will be certain advantages in establishing such colleges as integral parts of local universities which are not strictly uni-collegiate. For, when the staff of women is unable to deal with the whole course, the professors of the surrounding colleges would be able to afford assistance.”

79. But those who have given most thought to the organisation of future work in this field desire, while retaining a close connexion with the University, to create a body specially concerned with women’s education, and to give to it a considerable degree of autonomy. Thus the Association of University Women¹ advocate the establishment of a special Council, which should meet at stated intervals, have access to all the proceedings of the Senate, and forward its recommendations to the Syndicate. They apparently do not contemplate that this body should be more than advisory, for they do not assign to it any executive functions. They would include in it two representatives of each affiliated women’s college, one being the principal; principals of recognised schools; a representative of European schools; two representatives of their own Association; one representative of the needs of medical students; and an additional member to be co-opted.

80. In her oral evidence² Sister Mary Victoria advocated a similar scheme, though in less detail: she urged the establishment of a small committee of men and women for the supervision and organisation of the higher education of women, which should be under the ægis of the University. Dr. Bidhan Chandra Ray,¹ in the same vein, urges that “ the colleges for girls should be placed under a committee mainly composed of women and of men appointed by the Senate who take an interest in female education,” and that the colleges should have a large degree of freedom from direct control by the University, the necessary supervision being exercised through this committee.

¹ Question 23.

² Printed at the end of answers to Question 23.

81. Miss Marie Banerjee of the Bethune College¹—the only Indian woman teacher who has written to us—is concerned to organise not merely the university courses followed by women—these, she thinks, must be the concern of the University—but also the non-university work.

“There should be a special Board,” she suggests, “consisting mainly, if not entirely, of women. The Board should be entrusted with the promotion, guidance and control of the education of women in general, irrespective of the communities to which they may belong. This Board of Studies should be independent of the University.”

82. Miss A. L. Janau, of the Bethune College, in a very full treatment of the subject,¹ argues strongly against the creation of a separate university for women, and in favour of the broadening of the basis of the present university system, so that it may do fuller justice to the needs of women during the difficult and dangerous period of transition now beginning.

“No body of men,” she says, “is competent to deal with the manifold problems which such a transition creates: only the women of India can do that. The co-operation of the men will be needed at every step, but their contribution must be that of ready sympathy and of a determination to help the women in every way to realise their at present hidden capacities.”

She therefore advocates, in a striking passage, the creation at the earliest possible date of a commission “to deal with the whole of women’s and girls’ education in India. The need of an ideal, of a plan, for the whole of such education is the first and the greatest need.”

“The Commission should consist of women, as representative as possible women imbued with new ideas and aspirations, women representing the more conservative forces, women well versed in the ideals of India’s ancient civilisation, women representative of every community. With these should be associated western women who can give of their mature experience both in Europe and in India, western women in sympathy with the formation of a real Indian type of womanhood, a type founded on, and developing from, the heroic women of India past, the Seetas, the Sabitris, the Damayantis, than whom no finer women need be sought as models for the future ideal Indian women.

The Commission would prepare a plan; and to do this would study the past, its aims and ideals, its successes and its failures—the past not of India only, but the educational past of other lands—and, drawing from these a rich experience, would be able to give India a plan that would allow of the moulding of present circumstances, which are still quite plastic, and of making them

¹ In Bethune College answer to Question 23.

subserve the purpose of raising a fair fabric, which should be a complete and well balanced structure calculated rather to serve future developments than *only* to deal with present needs."

83. Thus it appears that those among our correspondents who have the most intimate knowledge of and the deepest interest in the education of women are convinced that, if the great opportunity and the great need of the present moment are to be adequately used and met, some special organisation or organisations must be set up to consider the problems of women's education apart from, though in relation to, the more developed problems of men's education. This is not the place in which to discuss the very interesting schemes and proposals which we have described in the foregoing paragraphs: they ought to be considered in relation with the whole scheme of educational reorganisation which we shall endeavour to set forth in later sections of this report. But this much at least may be said. If, as we have been driven to recognise, the education of women in Bengal is in a very backward condition, is surrounded by difficulties, and is nevertheless of the most vital importance for the welfare of the country, it is something to be assured, as the writers from whom we have quoted are able by their own discussion of the subject to assure us, that this great issue is seriously engaging the thoughts and sympathy of some of the best minds in Bengal. While that is so, there is no need for pessimism. What is needed is a system which will enable those who deeply care, as some of our correspondents manifestly do, about the provision of an appropriate system of training for Indian women, and who realise the profound importance of the subject, to have greater freedom in devising the means for realising their ends.

CHAPTER XV.

POST-GRADUATE TEACHING AND RESEARCH.

I.

1. In a previous chapter¹ we have described the condition of the 'arts colleges' in Calcutta and in the mufassal and their contribution towards undergraduate teaching, but we have made no reference to the part played by them, now or till recently, in the task of preparing graduates for the M.A. and M.Sc. degree examinations. In the present chapter we shall deal with the development and present condition of M.A. and M.Sc. teaching, which, under arrangements recently introduced, is conducted in Calcutta by new organisations in the University, and in the mufassal by affiliated colleges and approved lecturers. We shall conclude the chapter with a brief description of the organisation of facilities for research by advanced students and teachers, as also an account of the foundation of the University College of Science.

2. As regards the development of the arrangements made from time to time for instruction in the M.A. and M.Sc. courses, the statement conveniently falls into five distinct periods, namely, 1858-64, 1865-84, 1885-1908, 1908-17, and 1917-18.

3. When the first regulations of the University were framed in 1858, provision was made for the institution of an examination for the degree of master of arts. The regulations contemplated that the degree of bachelor of arts might be taken ordinarily at the end of four years from the date of matriculation, and specifically provided that during this period the candidate should regularly pursue the prescribed course of study at a college affiliated to the University. The regulations, however, did not require a candidate for the M.A. degree to have pursued a course of study in an affiliated institution subsequently to the date of graduation; any graduate of the University or of any of the other Indian universities or of any of the universities of the United Kingdom was entitled to be admitted to the M.A. examination on payment of the prescribed fee. The regulations further provided that if a candidate passed the B.A. examination at the end of four years

¹ Chapter XIII.

from matriculation and the M.A. examination immediately following, that is, within one month, he was to be deemed to have obtained honours; the names of such candidates were to be published in order of merit in lists classified according to subjects. The names of all other candidates successful at the M.A. examination were to be published in a list issued in alphabetical order without specification of class or subject. This system continued in force for seven years from 1858 to 1864. During this period, 119 persons passed the B.A. examination; of these, 19 appeared at the M.A. examination; 9 were successful but none obtained honours.

4. The university authorities appear to have speedily realised that it was impracticable for even the best prepared candidates to qualify themselves for the M.A. examination in four years from matriculation. The rule was accordingly altered in one respect, namely, candidates who had taken the B.A. degree at the end of four years from matriculation were deemed to have obtained honours at the M.A. examination, if they took the M.A. degree within one year (instead of one month) from graduation. This system continued in operation for 20 years from 1865 to 1884. During this period, 2,251 persons obtained the B.A. degree; of these, 907 appeared at the M.A. examination; 554 were successful, of whom 392 obtained honours.

5. In 1885, a further alteration was introduced into the M.A. regulations. It was laid down that all successful candidates at the M.A. examination would be arranged in order of merit, subject by subject, no matter what time had elapsed in the case of a particular candidate between matriculation and graduation or between graduation and the M.A. examination. This system continued in force for 24 years from 1885 to 1908. During this period, 10,464 persons took the B.A. degree and 60 persons took the B.Sc. degree, which was instituted in 1902 to secure proper recognition of those who took up scientific subjects at the degree examination. Out of these 10,524 persons, 4,180 appeared at the M.A. examination, of whom 1,804 were successful.

6. From 1909, the new regulations framed under the Indian Universities Act, 1904, came into operation. These regulations introduced three changes of a vital character as regards the M.A. examination:—

- (i) No one was to be permitted to proceed to the M.A. examination in less than two years from graduation.

(ii) A candidate became eligible for admission to the examination in two years, only if he had, after graduation, pursued a regular course of study during that time in an affiliated college or under university lecturers. If he had not done so, he could appear at the examination, only at the end of not less than three years from graduation.

(iii) The course of study in each subject was thoroughly remodelled. In fact, the course in some subjects was so highly specialised and widened in scope as to become at least as comprehensive as what was at that time prescribed for candidates at the corresponding examination of some of the British universities.

During the first seven years of the operation of this system, from 1909 to 1915, 6,026 persons obtained the B.A. degree and 1,165 obtained the B.Sc. degree. Of these 7,191 graduates, 2,158 appeared at the M.A. examination and 407 at the M.Sc. examination, which was instituted in 1909; 1,171 passed the M.A. examination and 226 passed the M.Sc. examination.

7. It is instructive to compare, during each of these periods, the average number of new graduates turned out each year, the average number of those that annually proceeded to the M.A. examination and the average number of those that annually passed the M.A. examination.

Period.	Average annual number of graduates.	Average annual number of graduates appearing at the M. A. examination.	Ratio of figures in column 3 to those in column 2 expressed as percentages.	Average annual number of successful M.A. graduates.	Percentage of successful candidates at the M.A. examination.
1	2	3	4	5	6
1868-1884 . . .	17	3	18	1.1	47
1885-1894 . . .	113	45	40	27.6	60
1895-1903 . . .	438	174	39	75	44
1909-1915 . . .	1,027	366	36	100	54

This shows that, leaving aside the first seven years when the condition of things was more or less experimental, for a period of half a century from 1885, the proportion of B.A. graduates who have sought admission to the higher examination has remained fairly steady, varying from 36 to 40 per cent. Again, the propor-

tion of successful candidates at the M.A. examination has remained almost equally steady, varying between 44 and 60 per cent. It follows that although, during the third period (1885-1908), the average annual number of graduates was nearly four times the average annual number during the second period (1865-84), and although during the fourth period (1909-15) the average annual number of graduates was nearly $2\frac{1}{2}$ times the average annual number of graduates during the third period (1885-1908), the proportion of those who sought admission to the higher degree did not fall off. Further, notwithstanding the fact that the course prescribed has been steadily widened and stiffened, the proportion of successful candidates at the M.A. examination has not fallen off.

8. It is useful, at this stage, to narrate the facilities available, from time to time, for the instruction of candidates for the M.A. examination or of such of them as might desire to have the benefit of teaching in their special subjects. It is a remarkable fact, first discovered while the Indian Universities Bill was before the Council in 1903, that no college (except one which is not within the jurisdiction of the Calcutta University at present) had up to that date been affiliated to the M.A. standard. The regulations, as already stated, did not require that M.A. candidates should have been in training after graduation, and few, if any, of the colleges had the staff necessary for adequate instruction in the whole of the M.A. course in one or more subjects. The college professors gave such assistance as they could to their graduate students, but devoted themselves principally to undergraduate work. Occasionally, a college sent up candidates to the M.A. examination in a particular subject, so long as there was on the staff one or more professors able and willing to help graduate students in that subject; this is well illustrated by the history of the Dacca College, the Krishnagar College, the General Assembly's Institution and the Duff College. Even in the Presidency College, the M.A. classes were not held systematically, and while during the principalship of Mr. Charles Henry Tawney the M.A. class in English was regularly held, the classes in other subjects were often merely nominal; intending candidates helped themselves as best as they could with the books in the library. Here it may be added in passing that the lists in the University Calendar are sometimes misleading; the mere fact that the name of a particular

college is affixed to that of a successful M.A. candidate does not necessarily indicate that he has received a full training in that college after graduating as a B.A. from that institution. This was more or less the state of things when in 1907 the question of revising the affiliation of the then existing colleges was taken up in accordance with the regulations framed under the Indian Universities Act.

9. Section 3 of the Indian Universities Act, which came into force on the 1st September 1904, provides as follows :—

“ The University shall be and shall be deemed to have been incorporated for the purpose, among others, of making provision for the instruction of students, with power to appoint university professors and lecturers, to hold and manage educational endowments, to erect, equip and maintain university libraries, laboratories and museums, to make regulations relating to the residence and conduct of students, and to do all acts, consistent with the Act of Incorporation, which tend to promotion of study and research.”

Section 1 of Chapter IX of the university regulations, as promulgated by the Government of India on the 11th August 1906, gave effect to the above provision in the following terms :— “ The University shall provide for post-graduate teaching, study and research in the Faculties of Arts and Science.” Section 2 of the same chapter contemplated the appointment of persons connected with the affiliated colleges as also of persons not so connected as university lecturers for the benefit of M.A. and M.Sc. students. Section 3 provided for the remuneration of a university lecturer from university funds ; while Section 8 indicated that, in the case of a university lecturer who was a professor of an affiliated college, the fees paid by the students for attending the course of lectures delivered by him became the property of the college to which the lecturer belonged.

10. As already explained, at the time of the enforcement of the regulations promulgated under the Indian Universities Act, there was no college affiliated to the standard of the M.A. examination. The consequence thus was that when, upon the introduction of the new regulations, the affiliation of the then existing colleges was reduced and restricted under Chapter XIX, there was no college left within the domain of the University which was authorised to teach up to the M.A. or M.Sc. standard. Nor did any of the colleges apply at once for affiliation up to the M.A. or M.Sc. standard. Even such institutions as the Presidency College, the General Assembly’s Institution, and the Duff College

found the demand made upon their resources in reorganising the undergraduate classes and reconstituting the staffs for that purpose in accordance with the new regulations so heavy that they did not find it practicable during the first year to make adequate provision for affiliation up to the M.A. and M.Sc. standard in even a single subject. In 1907, however, the Duff College obtained affiliation in portions of two subjects, philosophy and mathematics, and in 1910 this affiliation was taken over by the Scottish Churches College formed by the amalgamation of the Duff College and the General Assembly's Institution. In 1908, the Presidency College obtained affiliation in history, economics, one branch of English and one branch of mathematics. The amount of post-graduate teaching which these two colleges could then undertake was, however, comparatively limited, and it became inevitable that the University must either appoint as university lecturers such persons as were available, with a view to conduct M.A. and M.Sc. classes in fragments of subjects, or must leave a large number of students to appear as non-collegiate students after the lapse of three years from the date of graduation, instead of after two years' study as regular university students.

11. In these circumstances, the University proceeded, on the 10th September 1908, to recommend to the Government of India the appointment of two university lecturers, namely Mr. W. C. Wordsworth and Dr. E. P. Harrison, both of them at the time professors of the Presidency College. They remained university lecturers for the two sessions 1908-09 and 1909-10. In 1909, the University recommended to the Government of India for appointment as university lecturers 18 gentlemen, of whom 15 were to lecture in Calcutta and 3 in Dacca. Shortly afterwards, the University recommended the appointment of one gentleman as university lecturer to deliver lectures in Rajshahi. From an analysis of the names of the university lecturers appointed under this scheme from its initiation in 1908 up to the middle of 1917, when the new post-graduate system came into force, it appears that university lecturers had been appointed to deliver lectures at Calcutta, Dacca, Rajshahi and Patna; but the majority of appointments were made for the delivery of lectures at Calcutta.

12. The system, in its earlier stages, was entirely inadequate to meet the needs of the students who sought instruction in M.A. and M.Sc. courses. The gentlemen appointed were as a rule con-

nected with one or other of the Calcutta colleges and could deliver lectures only in a more or less casual manner after their under-graduate work had been finished for the day, in their respective colleges. It is not a matter for surprise that the students who attended these lectures were dissatisfied, as the hours were inconvenient and the lectures delivered were not sufficient in point of number to cover any appreciable portion of the courses. Meanwhile, the classes in pure mathematics at the Scottish Churches College disappeared in 1912 on account of the death of Mr. G. S. De. But even in the classes maintained in the Scottish Churches College and in the Presidency College the affiliation of which was extended from time to time so as to include successively physics, chemistry, philosophy, and, quite recently, botany and physiology, accommodation could be found only for a relatively small number of students, and in cases of competition for admission, preference was naturally given to graduates of the respective colleges. The position thus was that while the number of young men anxious to have help in their M.A. and M.Sc. studies continued to increase very steadily (as will be clear from the figures given below), the colleges were unable to cope with the demand.

Year.	Number of M.A. students in the univer- sity classes.
1908-09	— 19
1909-10	60
1910-11	115
1911-12	209
1912-13	375
1913-14	1,066
1914-15	1,119
1915-16	993
1916-17	1,172

13. This sudden increase in 1913-14 in the number of students who were anxious to obtain assistance in the pursuit of their M.A. studies was attributed by the Government of India Post-Graduate Committee¹ to two causes:—

(i) The new courses for the M.A. examination were so extensive as to render adequate assistance necessary, if a candidate wished to have a reasonable prospect of success at the examination.

(ii) If a candidate appeared as a private student, he had to wait for three instead of two years after graduation.¹ Besides these two circumstances, other causes also were silently in operation.

In 1907-08, the Syndicate undertook a systematic survey of all the affiliated colleges, defined the scope of their affiliation in every instance, and required them to strengthen their staff substantially in all the subjects they undertook to teach.

In 1908-09, the Syndicate made a similar survey of all the recognised schools, and prescribed a minimum standard of the number and qualifications of the teachers to be employed. The result of the action thus taken by the Syndicate was to create a large and steady demand for qualified graduate teachers and lecturers; for the University required that college lecturers should invariably hold the M.A. degree, while in the case of head masterships of schools, preference was naturally given to M.A. graduates whenever they were available.

Finally, in 1909-10, it was decided to extend the period of law study from two to three years after graduation in arts or science; this rendered it comparatively easy for graduates to undertake M.A. and B.L. studies simultaneously.

14. The following table contains a detailed analysis, subject by subject, and year by year, showing the number of students in the different subjects taken up:—

Subjects.	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	1916-17
English									
Economics	2	9	22	16	72	220	296	332	381
Philosophy	12	38	69	103	83	156	102	97	113
History	5	13	17	25	14	193	211	171	104
Sanskrit	...	...	...	...	2	20	25	165	168
Persian	...	...	...	...	...	180	19	22	7
Arabic	...	...	...	...	...	3	5	5	5
Pali	...	...	...	...	...	1	2	2	2
Comp. Philology	...	...	4	5	3	4	0	3	...
Botany	...	...	3	3	1	13	12	1	...
Pure Mathematics	...	...	...	...	98	247	222	195	280
Total	19	60	115	209	375	1,006	1,119	993	1,172

A glance at the table will show that English and pure mathematics have steadily maintained their popularity. Next follow

¹ The temporary fall during the year 1915-16 in the number of students in the university classes was possibly due to the increase of the tuition fee from Rs. 6 to Rs. 7 a month.

history and philosophy, very close together ; then comes economics, rather a long way behind. The number in Sanskrit, though small, has been fairly steady. None of the other languages, Persian, Arabic and Pali, has been much of a favourite.

The following table gives the number of candidates at the M.A. and M.Sc. examinations since 1910 :—

Degree.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
M.A.	141	204	276	406	523	501	655	742	720
M.Sc.	14	35	56	81	94	127	166	151	184
TOTAL	155	239	332	487	617	718	820	893	901

It may be observed that many of these candidates were 'non-collegiate students,' that is, persons who had not received the prescribed training for the full period of two years in an affiliated college or under university lecturers. It would be a mistake to assume, however, that all the non-collegiate students had received no training at all, for many of them are persons who had attended some of the courses of lectures. It may also be noted that a large proportion of the candidates for the M.Sc. examination take up mathematics in which no laboratory training is required.

15. It is manifest, however, from an examination of the figures that the systematic teaching of the M.A. course to such large classes of students could not possibly be satisfactorily managed without the employment of some whole-time men at least, who would make this the object of their special study and thought. But here a practical difficulty arose. A capable and experienced scholar, if he was required to devote himself mainly, if not exclusively, to M.A. teaching in the University, looked for some security in his tenure of office, as might indeed have been expected. Under the university regulations, as they stood then, a university lecturer could be appointed only for a term of two years, and it was not possible to secure the services of competent senior men who naturally declined to take the risk of being cast adrift at the end of two years. It was consequently found necessary to appoint assistant professors, as contemplated by Section 3 of Chapter IX. of the Regulations, who could be appointed for such periods as the Senate might in each individual case determine. The following table contains an

analysis of the number of M.A. and M.Sc. teachers in Calcutta, other than those in the Presidency College and the Scottish Church College :—

Year.	Number of university lecturers	Number of assistant professors.	Total
1908-09	2	...	2
1909-10	22	...	22
1910-11	21	...	21
1911-12	26	...	26
1912-13 ⁴⁴	54	...	54
1913-14	45	3	48
1914-15	30	14	44
1915-16	28	18	46
1916-17	21	23	44

10. With the growth of the system just outlined, it was also found necessary to employ university professors to supervise the work done by the lecturers in their respective departments. The professors who have done so are named below :—

Minto Professors of Economics—

Mr. Manohar Lal.

Mr. C. J. Hamilton.

George V Professor of Philosophy—

Dr. Brajendranath Seal.

Hardinge Professor of Mathematics—

Dr. W. H. Young.

Carmichael Professor of Ancient Indian History and Culture—

Dr. George Thibaut.

Professors of English—

Dr. Henry Stephen.

Mr. Robert Knox.

Professor of Comparative Philology—

Dr. Otto Strauss.

11. The entire agency for M.A. teaching in the University from 1908-17 may consequently be outlined as follows :—

(a) University Professors—whole-time officers of the University appointed for stated terms.

- (b) University Assistant Professors—whole-time officers of the University appointed for stated terms.
- (c) University Lecturers :—
 - (i) Some whole-time officers appointed for two years, as in the subjects of the Vedas and Pali.
 - (ii) Some part time officers, generally professors in local colleges, appointed and reappointed for terms of two years.

18. It may here be observed that in some subjects for which instruction was provided in the University, no arrangement existed in any affiliated institution. These subjects were pure mathematics, comparative philology, Pali, Persian, Arabic and Sanskrit. It is also worthy of mention that even in the case of subjects for which provision was made in one or other of the affiliated colleges, the University arranged for the teaching of alternative branches or groups which no college, with its limited resources, was in a position to undertake.

19. There is one special feature about Sanskrit to which attention should be drawn. The Sanskrit College, the resources of which were unreservedly placed at the disposal of the University, could not obtain affiliation by reason of three circumstances :—

- (i) Satisfactory arrangements could not be made for instruction in the Vedas, which forms a compulsory subject for the examination.
- (ii) No provision was made for instruction in comparative philology which also is a compulsory subject for the M.A. examination in Sanskrit.
- (iii) The services could not be secured of a sufficient number of scholars who had studied the different branches of Sanskrit learning in the light of the researches of western investigators.

The University met the situation by including in its staff, (1) a professor of Vedas, (2) a lecturer on comparative philology, and (3) M.A.'s of the University, two of whom undertook to lecture to M.A. students in addition to their work in their respective colleges.

20. The result which followed from this system was a most regrettable feeling of distrust and jealousy between the University and some of its colleges. The authorities of the colleges,

though realising the need for the university classes, distrusted their efficiency owing to their large size and felt suspicious that the University wished to crush ultimately their higher classes out of existence. The professors in charge of the university classes were not slow to reciprocate the feeling and felt suspicious that the authorities of the colleges desired to have a monopoly of higher teaching so as to be able to restrict its field. That the feeling of rivalry was to some extent inevitable, is clear from an examination of the numbers of students in the two affiliated colleges as compared with the numbers in the university classes already given. We take the figures for 1916.

Subject.	Fifth year class. ¹	Sixth year class.	TOTAL
Presidency College—			
English	42	34	76
History	18	20	38
Economics	36	27	63
Philosophy	11	15	26
Mathematics	20	34	54
Physics	18	18	36
Chemistry	7	7	14
Geology	2	2	4
Physiology	5	3	8
Botany	6	1	7
TOTAL	166	161	326
Scottish Churches College—			
Philosophy	18	5	23
University classes— . . . . .	..	..	1,172 ²

21. It is obvious that neither of the individual colleges nor even a group of colleges working in co-operation could have provided for the needs of more than 1,500 graduates. There is thus no

¹ The class is so called as students join it after the lapse of four years from date of matriculation.

² The details of distribution of the subjects are set out in para. 14 above.

escape from the position that the appointment of a full time university staff was essential, particularly in arts, for, without it, the number of private students receiving no instruction and subject to no control whatever would have reached at least a thousand, with disastrous consequences to themselves and to the cause of higher education. In science, the position was somewhat different; the number of students receiving instruction was not intrinsically unmanageable; but the accommodation available in the Presidency College laboratories was inadequate to meet the demands in some subjects, and in the event of competition between a pass graduate from the Presidency College and an honours graduate from another college, preference was sometimes given to the former—a course which, however justifiable from the narrow college point of view, could not but cause dissatisfaction to the student excluded.

22. A closer scrutiny of the facts strengthens the view that it was incumbent on the University to intervene and meet the demand for instruction in M.A. and M.Sc. courses which the colleges were to a large extent unable to satisfy. No affiliated college could, under existing conditions, venture upon the instruction of over one thousand students in the different branches of study included in the curriculum for the M.A. examination; indeed, when in 1915 the University enquired of the colleges whether they were prepared to apply for affiliation to the M.A. or M.Sc. standard in one or more subjects, not a single institution responded. If we take at random the numbers of graduates who obtained the B.A. or B.Sc. degree in 1915 from some of the leading colleges in Calcutta and from one of the leading mufassal colleges in Western Bengal, we find that they disclose the following figures:—

Name of college.	B.A.	B.Sc.	TOTAL.
Presidency	53	66	119
Ripon	211	...	211
City	143	10	153
Vidyasagar (late Metropolitan)	120	10	130
Scottish Churches	116	37	153
Bangabasi	56	15	71
Berhampur.	55	16	70

23. Now, let us examine the full significance of these figures taken along with those previously given, which show that, during the last half a century, on an average, 40 per cent. of those that take the B.A. or B.Sc. degree seek to obtain the M.A. degree. If it be conceded that those graduates of the Presidency College who seek to proceed to the degree of M.A. should be allowed, if they so desired, to continue their studies in their college, a question obviously arises, in regard to the students of the other colleges which, except the Scottish Churches, have no affiliation up to the standard of the M.A. examination. The Presidency College could not possibly claim as of right to provide, and, even if it advanced the claim, it had not the means to provide, for the efficient instruction of all graduates from all the other colleges in the University. But even if the college could secure the means, those students from the other colleges could not force themselves upon an institution which, for the sake of efficiency, must have a manageable size.

24. The truth is that though there was within the domain of the University a large number of colleges authorised to teach up to the B.A. and B.Sc. standards, there were but two institutions qualified to teach in some branches alone up to the standard of the M.A. and M.Sc. degrees. Consequently, with a steady increase in the number of B.A. and B.Sc. graduates, it became increasingly difficult and ultimately impracticable for these two colleges to meet effectively the needs of the situation. The University thus could not justifiably decline to discharge the obligation imposed on it by the Indian Universities Act, 1904, and by the regulations framed thereunder. Apart from this, we cannot overlook the fact that scholars qualified to undertake M.A. teaching are by no means abundant, and, even if they were, there would be a needless loss of energy, due to superfluous duplication of work, if the different colleges were to behave like watertight compartments, each a university in miniature, each to attempt full M.A. teaching in one and the same subject for small groups of their own students, when by the combination of all the teachers, a really competent teaching staff could easily be evolved. Thus, it became fairly obvious that some reorganisation of the arrangements for post-graduate teaching in Calcutta must be undertaken, and the position grew acute when both the University and the Presidency College repeatedly made insistent demands, the one upon the

Government of India, the other upon the Government of Bengal, for funds for the promotion of higher teaching. Under these circumstances, the Government of India, with the concurrence of the Government of Bengal, decided on the 20th October 1916 to have the whole matter investigated by a committee.

III.

25. The scope of the Committee appointed to consider the question of post-graduate studies in the University and its constituent colleges was described in the following terms:—

“The Committee should review the existing facilities in the University of Calcutta for instruction beyond the bachelorship degrees and should make suggestions whereby the existing expenditure and available resources for such teaching may be put to the best use. The Committee should be asked to examine the points referred to it with special reference to the quality of the teaching given, the recommendations made by the Universities Commission, the economic employment of the resources of the University and the colleges in men and money, including the grants now given by the Imperial Government, the remuneration of the teachers and fees paid by the students, the relation of the University as a teaching body to its affiliated colleges, and to the maintenance of suitable relation between teachers and the students in the University. The Committee should frame its recommendations merely with a view to the best expenditure of existing funds and it should understand that further grants for post-graduate education cannot be expected in the near future.”

26. The unanimous report of this Committee (Sir Asutosh Mookerjee, Mr. Hornell, Dr. Hayden, Dr. Seal, Dr. Howells, Dr. Ray, Mr. Hamilton, Mr. Wordsworth and Mr. Anderson) was presented on the 12th December 1916. The Government of India, after examination of the report, forwarded it to the University for consideration, with the intimation that if the Senate accepted a scheme corresponding substantially to that put forward by the Committee, the Government of India with the concurrence of the Government of Bengal would not raise any objection thereto. The matter was elaborately discussed by the Senate at four sittings, and, ultimately, regulations drafted on the lines of the report by a sub-committee were adopted with slight modifications. These regulations received the sanction of the Governor-General in Council on the 26th June 1917, and constitute the present Chapter XI of the university regulations. It is necessary to give a brief outline of the regulations which embody the arrangements now in force for post-graduate teaching in the University.

27. The regulations distinguish between post-graduate teaching in Calcutta and outside Calcutta. In Calcutta, post-graduate teaching can be conducted only in the name, and under the control, of the University; in other words, on the date the new regulations came into force, the affiliation of the Presidency College and the Scottish Churches College in certain subjects for the M.A. and M.Sc. examinations lapsed. For the organisation of post-graduate teaching in Calcutta, the regulations create two new authorities, the Council of Post-Graduate Teaching in Arts and the Council of Post-Graduate Teaching in Science.

28. The regulations further provide that the staff for post-graduate teaching in Calcutta shall consist of four classes of teachers, namely, (a) teachers appointed and paid by the University, (b) teachers whose services have been, on the application of the University, lent from time to time by the local or Imperial Government or by a private institution and who, during the time they work under the University, are university officers, (c) teachers in colleges whose attainments specially qualify them for post-graduate instruction and who undertake, at the request of the University, and for a remuneration decided on by it, to deliver a course of lectures on selected topics; and (d) persons engaged in other than educational work who undertake, at the request of the University, and for a remuneration decided on by it, to deal with special subjects in which they are authorities. In order to smooth the transformation of the old system into the new, the regulations expressly provide that, for the purpose of the constitution of the first Council, all persons who on the date of commencement of the regulations were engaged, either under the University or in an affiliated college in Calcutta, in post-graduate work in arts or science, were to be deemed university teachers duly appointed in conformity with the new regulations.

29. The regulations next prescribe that the Council of Post-Graduate Teaching in Arts shall be composed (a) of all persons appointed teachers for post-graduate instruction in arts, *ex-officio*, (b) of four members annually appointed by the Senate, (c) of two members annually appointed by the Faculty of Arts, and (d) of heads of all colleges in Calcutta affiliated to the B.A. standard. There is a similar provision for the Council of Post-Graduate Teaching in Science which defines the constitution of the Council as follows:—(a) all persons appointed teachers for

post-graduate instruction in science, *ex-officio*, (b) four members annually appointed by the Senate, (c) two members annually appointed by the Faculty of Science, and (d) heads of all colleges in Calcutta affiliated up to the B.Sc. standard. The Councils are authorised to elect their respective presidents.

30. Each Council is provided with an executive committee, a wholetime salaried secretary, and Boards of Higher Studies. The Executive Committee of the Council of Post-Graduate Teaching in Arts is constituted as follows :—(a) two representatives of each of the following branches of study, (i) English, (ii) Sanskrit and Pali, (iii) Arabic, Persian, Hebrew and Syriac, (iv) mental and moral philosophy and experimental psychology, (v) history, political economy and political philosophy, (vi) pure mathematics ; the representatives of each subject or group of subjects are elected by the staff in the subject or subjects concerned from amongst themselves, subject to the proviso that no member of the staff, except a university professor, is eligible for election to the executive committee unless he is a graduate of at least seven years' standing ; (b) two members selected by the Senate from its nominees on the Council ; (c) one member selected by the Faculty of Arts from its nominees on the Council. The President of the Council is *ex-officio* President of the Executive Committee. There is a parallel provision for an executive committee of the Council of Post-Graduate Teaching in Science.

31. The Board of Higher Studies in each subject or group of subjects consists of (a) teachers of that subject or the group of subjects, who are members *ex-officio*, (b) 3 persons selected by the Council from amongst its members, and (c) not more than 2 members co-opted by the above mentioned persons from amongst those engaged in post-graduate teaching in the subject concerned in places outside Calcutta. Each Board of Higher Studies annually elects its own chairman, subject to the proviso that no person, except a university professor, is eligible for election as chairman of a Board unless he is a graduate of at least seven years' standing. The duty of the Chairman of each Board is to supervise generally the teaching arrangements in that department and to ensure compliance with the resolutions of the Board, the Executive Committee and the Council in that behalf.

32. The Council is vested with authority, subject to the ultimate control of the Senate, (the order of the Senate to be communicated

by the Syndicate), to deal with all questions relating to the organisation and management of post-graduate teaching in arts in Calcutta.

33. The Executive Committee receives and considers reports from the Boards of Higher Studies as to the progress made in their respective subjects and the results of the examinations, and exercises such supervision and gives such direction as may be necessary to ensure regularity of work and maintenance of discipline among the students.

34. The Board of Higher Studies in each subject is authorised to initiate proposals regarding (a) courses of study, (b) text-books or recommended books, (c) standard and conduct of examinations, (d) appointment of the teaching staff and the salaries attached thereto, (e) teaching requirements from year to year and preparation of the time-table, (f) distribution of work among the members of the staff in that department, (g) appointment of examiners, and (h) such other matters as may from time to time be specified by the Council with the approval of the Senate.

35. Proceedings of the Boards of Higher Studies are subject to confirmation by the Executive Committee. Proceedings of the executive committee are subject to confirmation by the Council concerned. Proceedings of the Council are then transmitted through the Syndicate to the Senate for confirmation.

36. The estimates of expenditure in each of the departments are prepared in the following manner:—Each Board of Higher Studies, not less than six months before the termination of the academic session, formulates the requirements of its special department during the ensuing session together with an estimate of the probable financial cost. The University Board of Accounts, on the basis of such estimates and in consultation with the Chairmen of the several Boards of Higher Studies, prepares a consolidated statement which is placed for scrutiny before the Executive Committee who reports thereupon to the Council. The budget estimate, as amended and adopted by the Council, together with the comments, if any, made thereupon by the University Board of Accounts, is laid before the Syndicate, who transmit it to the Senate, with such remarks as may be considered necessary, for final orders. The sum allotted for a particular department can be spent by the Executive Committee only on the recommendation of the Board of Higher Studies in that department.

37. As regards the conduct of examinations, the regulations provide that the Board of Examiners in each subject shall consist of internal examiners and external examiners. The internal examiners in any subject are such members of the Board of Higher Studies in that subject as have been appointed university teachers. The external examiners are appointed by the executive committee on the recommendation of the Board of Higher Studies concerned.

38. All appointments to the teaching staff, remunerated out of funds supplied by the Government of India, require the previous sanction of that Government. The names of all other persons appointed or reappointed university teachers are notified to the Government of India within one week from the date of the decision of the Senate. If within six weeks from the receipt of such notification, the Government of India intimate to the University that a specified appointment is objectionable on other than academic grounds, such decision takes effect and the appointment stands cancelled.

39. There is a general section which authorises the Senate, on the recommendations of the Councils, to frame rules from time to time to facilitate the management of post-graduate studies in Calcutta. These rules contemplate (a) a definition of the duties of the President of a council, (b) the appointment of a vice-president of a council and specification of his duties when so appointed, (c) the appointment of a teacher as principal, (d) the attachment of a university teacher to an affiliated college in Calcutta and participation by him in the work of instruction of under-graduate students, with the concurrence of the University, the college, and the teacher concerned, (e) the assignment of students to teachers and a definition of their relations, (f) a determination of the conditions of residence of post-graduate students, (g) the attachment of post-graduate students to affiliated colleges, (h) the recognition of the association of a student with an affiliated college, and (i) provision for joint meetings of Councils, Executive Committees and Boards of Higher Studies.

40. Finally, the regulations provide that, from the date of their commencement, a fund shall be constituted for the promotion of post-graduate studies to be called the post-graduate teaching fund. To such fund are to be annually credited, (a) grants from Government and benefactions made specifically for this purpose by donors, (b) fees paid by students in the post-graduate classes;

(c) one-third of the fees realised from candidates for the matriculation, I.A., B.A., B.Sc., examinations and (d) such other sums as the Senate may from time to time direct.

41. The provisions in the regulations relating to post-graduate teaching outside Calcutta practically leave things where they stood before the new system came into operation. In places outside Calcutta post-graduate teaching may be conducted either by means of affiliated colleges or by university lecturers or by both. But no person can be appointed a university lecturer in a place outside Calcutta till his name and qualifications have been considered by the Board of Higher Studies in his special subject. Two such centres of post-graduate teaching exist in places outside Calcutta. In Dacca the Dacca College is affiliated up to the M.A. standard in English. The Principal of the Jagannath College has also been appointed a university lecturer in that subject. In physics, chemistry, history, economics and philosophy individual members of the staff of the Dacca College have been appointed university lecturers, but they are able to cover only limited portions of each subject. In Gauhati the Cotton College is affiliated up to the M.A. standard in English. The number of students both in Dacca and Gauhati is very limited and many of the graduates from the colleges in Eastern and Northern Bengal pursue courses of post-graduate studies in Calcutta; such of the graduates however from these colleges as receive a stipend from Government are obliged to join either the Dacca College or the Cotton College.

42. This system as we have stated was sanctioned by the Government of India on the 26th of June 1917. The machinery was rapidly constituted, and the system came into working operation from the beginning of September 1917.

43. The essence of the system is that all students who desire to obtain instruction in the M.A. or M.Sc. courses in Calcutta must for this purpose be registered in the Senate House as university students. A student may attach himself to the college from which he graduated, or, where this is not feasible, to some other college in the city. The applications of such attached students are forwarded to the University by the head of the college concerned, and he makes himself responsible for their residence under proper conditions. Students who are unable to attach themselves to a college apply direct to the authorities of the teaching department of the University who have to make sure that they are residing

under proper conditions. Every student whose name has been thus registered in the University, whether through a college or directly, receives instruction from the university lecturers who are drawn, as we have already stated, from four classes.

44. The total number of students in the post-graduate classes in Calcutta, under the new arrangements, during the session 1917-1918 was 1,500, classified as follows:—

	Arts.	Science.
Fifth year class	779	97
Sixth year class	538	86

45. The following table shows the number of students attached to different colleges:—

	Arts.	
Fifth year class—		
Presidency College	95	
Scottish Churches College	19	
St. Paul's College	5	
Sanskrit College	3	
	Science.	
Presidency College	59	
	TOTAL	181
	Arts.	
Sixth year class—		
Presidency College	12	
Scottish Churches College	13	
	Science.	
Presidency College	51	
	TOTAL	76

Consequently the total number of students not attached to a college is 695 in the fifth year class and 548 in the sixth year class, that is, 1,243 in the aggregate. The following statement shows the conditions of residence of the students:—

Residence.	Fifth year class.	Sixth year class.
Hostels	56	40
Attached messes	62	39
Unattached messes	136	120
Parents	145	104
Related Guardians	251	180
Unrelated Guardians	36	37
Married and living with their families	13	28
	TOTAL	698
		548

46. The following tables show the number of students in the different subjects:—

Subject.	Fifth year class (Arts).	Sixth year class (Arts).
English	300	23
Pure Mathematics	133	131
Philosophy	98	66
History	123	66
Economics	85	86
Experimental Psychology	5	6
Sanskrit	26	13
Pali	3	1
Persian	1	1
Arabic	4	2
TOTAL	778	615

Subject.	Fifth year class (Science).	Sixth year class (Science).
Applied Mathematics	30	35
Physics	27	33
Chemistry	20	13
Botany	6	5
Geology	5	2
Physiology	3	5
TOTAL	91	93

47. The names of the university teachers for the session 1918-19 in the various subjects will be found in two statements¹ which also show the names of the gentlemen who are connected with various colleges in Calcutta.

48. The financial basis of these arrangements may be briefly described. During the session 1917-18, a sum of Rs. 3,50,360 was budgetted for expenditure on the arts side. Out of this

¹ Printed in the volume of appendices to this report.

ount, the Government of India contributed Rs. 51,000, namely, Rs. 36,000 for the maintenance of the three chairs on economics, mathematics and philosophy, and Rs. 15,000 for university lecturers. Rs. 1,10,400 was expected to be realised as tuition fees from students, and the balance Rs. 1,88,960 was to come out of the current income of the University, whereof the chief sources are examination fees and sale of publications. On the science side, a sum of Rs. 3,95,151 was budgetted for expenditure, including the equipment and maintenance of the laboratories. Out of this amount, the Government of India contributed Rs. 12,000 for the upkeep of the Palit laboratory, the Sir Tarak Nath Palit endowment contributed Rs. 87,795, and the Sir Rash Behary Ghose endowment contributed Rs. 71,200. Rs. 20,160 was expected to be realised as tuition fees from students and the balance Rs. 2,03,994 would come out of the current income of the University.

IV.

49. We have given above a full analysis of the new arrangements for post-graduate teaching, which constitute probably the most fundamental change made in the university regulations in recent years. The introduction of the new system has caused grave misgivings amongst experienced educationists, as is manifest from a perusal of the protracted debates in the Senate and from an examination of the opinions expressed by men like Mr. H. R. James, lately Principal of the Presidency College, Mr. C. W. Peake, for many years Professor of Physics in the Presidency College, Mr. R. N. Gilchrist, formerly Professor in the Presidency College and now Principal of the Krishnagar College, the Rev. W. E. S. Holland, Principal of St. Paul's College, and the Rev. Dr. W. S. Urquhart, recently officiating Principal and now Professor of Philosophy in the Scottish Churches College.

50. Mr. H. R. James in a memorandum on the subject of post-graduate teaching says—

"under Calcutta University, the academic life must be lived mainly in the colleges. That has been so from the first and it is likely to be so mainly in the future. Some of the colleges are at a great distance from Calcutta. In Calcutta, some of the colleges are so large as to form of themselves units of academic life as large as is convenient. A thousand students may associate together in a common life, but hardly eight thousand. For the continuance and development of college life it is expedient to strengthen the individuality of the colleges."

If this is granted, it follows that to cut off the colleges from any hope of keeping within the collegiate body their own advanced (that is, M.A. and M.Sc.) students is to limit disadvantageously their chances of development, while to take away M.A. and M.Sc. students from colleges that have them now is to do them injury. Leaving aside for the moment all questions of other colleges, I can speak with assurance of Presidency College. To take away, as is proposed, the M.A. and M.Sc. affiliation of Presidency College will be to affect the life of the institution as a collegiate and academic body most prejudicially. I can speak with confidence here because I have watched over the life of the college for a period of nine years continuously and I know what I am writing about. The University may decree this injury to Presidency College, and Government—it is a Government college—may acquiesce in the injury. But I am bound at least to point out, what is so clear to me, that if this is done, the college will be seriously injured both in prestige and in its usefulness as a place of education.”¹

Mr. C. W. Peake writes in the same strain:—

“ The changes in the regulations introduced recently on the strength of the report of the Committee appointed to consider arrangements for post-graduate teaching in the University of Calcutta represented a distinct advance over the existing state of things but were marred by one fatal and totally unnecessary defect. The advance consists in the arrangements made for the mutual co-operation of the University and the colleges in lecture work and generally in improved organisation of the boards of studies and other machinery for the control of examinations and study. The defect consists in the elimination of the college itself as a factor in post-graduate work. I consider that each student should be directly associated with a college for tutorial purposes, laboratory, library and general supervision. I regard the University College of Science of course as a college for this purpose. The connexion of the student with his college should be formally recognised and the college should be generally responsible for the welfare of the student inside and outside college. The student of course should share in the corporate life of the college.”²

We have not overlooked these criticisms, which were indeed anticipated by the Post-Graduate Committee, and we trust that the new synthesis between the University and the colleges which we shall recommend in a later chapter will furnish a happy solution of the difficulties mentioned by these experienced educationists.

51. Another obvious difficulty was presented by the position of the mufassal colleges.

The staff of the Dacca College in their memorandum on the subject emphasise the disadvantage at which that college has been placed under the new scheme:—

“ Before the operation of the new regulations for post-graduate teaching in Calcutta, university lecturers of the college were *ex-officio* examiners, and

¹ General Memoranda, page 225.

² *Ibid.*, page 227.

they thus had a share in determining the character and standard of the examinations. The effect of these regulations has been to exclude them from all bodies which control courses of studies and examinations, and thus to compel them to accept the decisions of the Calcutta members without being able to urge their own opinions. There are—

- (a) no representatives from Dacca on the Council of Post-Graduate Teaching in Arts or Science;
- (b) no representatives from Dacca on either of the executive committees of the councils; and
- (c) only two co-opted¹ members on the boards of higher studies. Further, as co-opted members, they are not internal examiners, since internal examiners in any subject are such members of the board of higher studies as have been appointed teachers under section 3.”²

Our scheme which includes the establishment of a university at Dacca will afford a satisfactory solution of a difficult situation.

52. It is not necessary for our purpose to analyse the discussions which took place in the Senate while the report of the Government of India Committee was under consideration. It is sufficient to state that considerable anxiety as to the probable effect of the scheme upon the development of higher education in the colleges was felt by an influential minority and the opinion was freely expressed that the ultimate result might be to weaken the influence and authority of some of the best colleges within the jurisdiction of the University. We shall not speculate about the possibilities of the new scheme, as we propose an entire reconstitution of the University which, we trust, will lead to a harmonious co-operation of the University and its colleges and will minimise the chances of undue domination by either over the other, a domination which would inevitably lead to unhappy friction detrimental to the best interests of their students. There is however an important lesson to be drawn from the study of the debates in the Senate, namely that, here as elsewhere, the difficulties in the way of the introduction of schemes of reform of a radical character are immense. This is emphasised by an incident which took place when arrangements for the actual commencement of work under the scheme were brought before the Senate for sanction. At that stage an endeavour was made to re-open the entire controversy and a proposal was brought forward

¹ According to section 9 (c) it is possible for each Board of Higher Studies to co-opt two members from those engaged in post-graduate teaching in the subject concerned in places outside Calcutta; nevertheless only two professors from Dacca have been co-opted.

² General Memoranda, page 221.

that the appointments of the proposed staff should not be confirmed by the Senate until an assurance had been received that the staffs of the Calcutta colleges were co-operating in the scheme to the full extent of their desires and available resources. After a full exposition had been given of the difficulties which were felt and the steps which had been taken to meet them, the proposition was lost; even the proposer did not vote for it. We mention this circumstance not with a view to suggest that the opposition was capricious but rather to show the extent of suspicion which attended the establishment of the new scheme. On the other hand, even if these doubts had not been wholly removed, the proposed arrangements were unanimously accepted. It is worthy of note that Mr. W. C. Wordsworth¹ states that though some members of the Presidency College staff feel that the influence of the teacher is not so great as it might advantageously be, others think highly of the scheme. When the proposals for the reconstitution of the staff for the current session 1918-19 were brought up before the Senate for confirmation on the 23rd March 1918, they were accepted without discussion. If dissatisfaction with the system still lingers in any quarter, as we believe to be the case,² the cause of it will, we hope, be removed by the new arrangements which we propose in this report.

53. It is not fair, we think, to pass a definitive opinion on the merits and demerits of a scheme which had been in operation for only a few weeks when our investigations commenced. But it would be useful to examine the possibilities of the system, to discover its advantages and disadvantages, which may help us to determine the most suitable constitution for a teaching university in Calcutta.

54. The reasons for the apprehension expressed by the experienced educationists who have been distrustful of the new system may be traced to two entirely different points of view. In the first place, there are some who are deeply attached to the ideal of an affiliated college as an institution which should provide for each of its students all the instruction which would be helpful to him in the pursuit of the studies of his choice. Critics

¹ General Memoranda, page 239.

² Reference may be made to the Report read at the annual meeting of the Scottish Churches College on the 10th January 1910.

of this type are likely to regard with suspicion, if not with positive disfavour, schemes of co-operation between college teachers and university teachers on an extensive scale. In the second place, there are others who, though not wedded to the affiliating system as best suited for an Indian university, yet maintain that a scheme which may permanently weaken the colleges, is full of danger to the realisation of the best educational aims and ideals. It is useful to bear in mind this fundamental difference in weighing the criticisms which have been advanced against the new system of post-graduate studies.

55. The foremost characteristic of the new arrangements, which gives them a decided advantage over the old system, is unquestionably the full and frank recognition of the elementary principle that the organisation and development of university studies must be entrusted in the main to the best teachers available. It is no exaggeration to say that under the system which was in operation till 1917, in respect of M.A. and M.Sc. studies, and which is in force even now as regards undergraduate studies, teachers as such had no controlling voice in the direction of academic affairs. We do not overlook the fact that, under the Indian Universities Act, a prescribed proportion of the ordinary fellows appointed by the Chancellor and elected by the Faculties must be teachers by profession; but it is a remarkable fact that in the Faculties and in the Boards of Studies, where the most important academic work is initiated, namely, the framing of the courses, the determination of the standards and the recommendation of the text-books, no teacher finds a place as such. The extent of this deficiency is realised fully upon a scrutiny of the composition of the Boards of Studies as they existed at the time when the new post-graduate scheme was introduced. Out of twelve members of the Boards of Studies in English, only three took part in M.A. instruction, two of them as university lecturers and one as a professor in Presidency College. Out of nine members who constituted the Board of Studies in Sanskrit, only two had any share in post-graduate teaching; in Arabic and Persian, not one of the eight members was associated with post-graduate teaching; in history, three out of twelve members were connected with M.A. teaching. It is not necessary to elaborate the point further. The state of things we have described was the inevitable result of a system, which, for reasons we need not discuss, limited

the size of the Senate to 100 members and which practically made it impossible for any person to be a member of a Faculty or of a Board of Studies unless he was first appointed a member of the Senate. We cannot too strongly emphasise this aspect of the matter, namely, that not only were the Boards constituted to a large extent of men without teaching experience, but a considerable proportion of the teachers engaged in post-graduate work either in the University or in its affiliated colleges were excluded, with the result that they were afforded no opportunity to express their views officially upon questions of fundamental importance relating to the subjects entrusted to their care. The post-graduate system, for the first time in the history of the University, recognised and gave effect to the principle that these teachers were entitled as of right to be associated in the management of the teaching arrangements.

56. The practical effect of this change has been manifest even during the few months that the system has been in operation. The courses which were framed by the Government of India in 1906, have, in several subjects, been modified in important particulars. The syllabuses in subjects like Pali and comparative philology have been entirely recast. In English and in comparative philology, a new plan has been introduced, which enables deserving candidates to substitute a piece of research work for the written examination in some of the subjects under carefully prescribed conditions. In history, a new curriculum has been drawn up in ancient Indian history and culture ; this course is varied and extensive, and *prima facie* would form an admirable subject for study and investigation in an Indian university. As regards the method of training, important departures from the old system have been adopted. The number of lectures previously delivered in the university classes has been reduced in many subjects, and each student is now required periodically to compose essays on prescribed topics which are announced by the teachers with hints as to suitable courses of study. The essays are then corrected ; and the teacher finally meets the students in small groups and discusses with them matters which arise on the written exercise. The lists of text books recommended have also undergone radical changes. It is thus manifest that, during the brief period that the system has been in operation, the teachers have made their presence felt. But, although we recognise the value of this advantage,

we think that there are elements of weakness in the present system. For instance, it practically places most of the teachers on the same level and fixes no limit to the size either of a Board of Higher Studies or of the Council of Post-Graduate Teaching. Some of the classes are also unwieldy in size, and more accommodation is urgently needed to enable the teachers and students to work in that intimate personal association in small groups which is essential for the success of the system.

57. The next striking feature of the new system is the recognition of the principle of co-operation in the organisation of post-graduate instruction in Calcutta. As already indicated, the regulations contemplate the constitution of the entire staff of post-graduate teachers from four different sources ; one of these is the body of teachers in affiliated colleges, whose attainments specially qualify them for post-graduate instruction and who undertake, at the request of the University and for a remuneration decided on by it, to deliver a course of lectures on selected topics. The principle on which the entire post-graduate scheme is based is thus the exact antithesis of a deep-rooted idea which has hitherto prevailed in educational circles in India, that each college ought to provide for each of its students the entire instruction which he needs in the pursuit of all the ordinary subjects of study. From this point of view, the authorities of a college would deem it derogatory to their dignity if one of the students of the institution considered it profitable to take a course of lectures in another college or in the University in preference to a course furnished by his college. Much of the opposition to the post-graduate scheme is traceable, we think, to the dominance of this ideal. It is clear that the post-graduate scheme gives valuable recognition to what, for reasons fully explained elsewhere in this report, must be deemed the fundamental principle, namely, that each student, no matter to what college he is attached, is entitled to have the advantage of the most helpful teaching given in the best educational institutions of this city. The advantages of this system of co-operation are manifest. If post-graduate instruction is conducted jointly by all the teachers whose services are available for the purpose, every student, irrespective of the college to which he belongs, gets the full benefit of the labours of every recognised teacher in his subject, with the limitation imposed by space and time-table. This secures variety of treatment from the point of view of

the students, and, at the same time, enables the teachers to specialise in different departments, and to concentrate their attention upon special aspects of their subject. An arrangement of this description further tends to minimise the weakness which presents itself when a member of the staff of a self-contained college abandons his connexion with the work for one or other reason. To take a concrete illustration. If there are four colleges in Calcutta, each undertaking to give the entire course of instruction in history for the benefit of M.A. students, each constitutes a close corporation by itself, maintaining a complete staff of say two teachers for the purpose ; in the event of a vacancy on the staff of one of the colleges, its efficiency may be reduced at once by a half, if a suitable substitute cannot forthwith be found. If, on the other hand, the work was entrusted to all the eight available teachers jointly, supplemented by those on the university staff, the absence of one member from a group so strongly constituted might often make no practical difference to the student. In fact, when we discard the narrow view that each college must be a self-contained institution, the adoption of the principle of co-operation seems an almost self-evident advantage.

58. But although a policy of co-operation and of combined organisation, when wisely worked out, may be accepted as a reasonable solution of the situation, the apprehension has been expressed that the constitution of a combined staff, which includes a large number of whole-time salaried lecturers of the University not attached to any affiliated college, may tend ultimately to bring the University into conflict with its affiliated colleges.¹ We do not deny that it would be unfortunate if this contingency happened, and it was to minimise this danger that the regulations make the principal of every Calcutta college affiliated to the standard of a degree in arts or science an *ex-officio* member of the Council concerned. The lists of lecturers in the different subjects under the new post-graduate scheme show that an appreciable proportion of the teachers are lecturers in the affiliated colleges. The following tabular statement is instructive. The first column gives the name of the subject. The figure in the second column gives the total number of post-graduate teachers in each subject, while

¹ Reference may be made to the oral evidence of the Rev. W. E. S. Holland, General Memoranda, page 501.

the figure in the third column shows how many of these are lecturers attached to different colleges :—

Subject.	Total number of post-graduate teachers.	Number of post-graduate teachers attached to affiliated colleges
English	18	9
Sanskrit	21	7
Pali	10	1
Arabic and Persian	8	...
Comparative Philology	3	...
Mental and Moral Philosophy	17	9
Experimental Psychology	8	1
History (ordinary course)	14	4
History (Ancient India)	16	1
Economics	19	6
Pure Mathematics	11	1
Applied Mathematics	11	5
Physics	14	5
Chemistry	11	4
Botany	4	2
Physiology	2	2
Geology	3	1
TOTAL	188	58

59. Two circumstances, patent to all who have an intimate knowledge of the present condition of affiliated colleges in Calcutta, may be usefully emphasised at this stage. In the first place, except in the case of the Presidency College and in a very much smaller degree the Scottish Churches College, the staff of no college was ever organised with a view to make any provision for M.A. and M.Sc. teaching. In the second place, the staffs of most of the Calcutta colleges other than the Presidency College are inadequate in point of number to meet the legitimate demands of the teaching requirements of the undergraduates on their rolls. Consequently

a large supply of post-graduate teachers could not be expected from the colleges as at present constituted ; but even if each college could supply in abundance teachers of the requisite type for the work of post-graduate instruction as a whole, they would obviously be far more effective, if they could work in unison rather than in rigidly separated compartments.

60. Another advantage of the post-graduate system, though of secondary importance, must not be overlooked. Under the university regulations relating to the residence of students, all students reading in an affiliated college with a view to appear at a university examination, are bound to comply with the rigid rules framed for that purpose. The post-graduate students in the university classes, on the other hand, were not bound under the old system to comply with any rules of residence, as they were technically not students of an affiliated college. Under the new system, all post-graduate students whether they do, or do not, belong to a college, are bound to comply with such residence regulations as may be framed by the authorities in that behalf. This has led to the introduction of a uniform system and has at the same time enabled the University to lay down more elastic rules for post-graduate students than would be suitable for undergraduates ; for it is plain that students, all of whom are at least in their 21st year, and many older by two or three years, do not require the same strict and rigid supervision as immature youths of 16 or 17 who find themselves suddenly thrown into the temptations of a great city.

61. But while the new system has obvious and substantial advantages, we must frankly acknowledge that it labours under what may prove in certain circumstances to be grave disadvantages. Thus, although under the new system almost entire responsibility is, in the initial stages, thrown, and rightly thrown, upon the teachers themselves, all their activities in the minutest detail are subject to criticism by the Syndicate and to final confirmation by the Senate. This renders possible a conflict between the Senate and the highest teachers of the University, who are and, under the existing constitution, must continue to be, very inadequately represented on the ultimate Governing Body. Such a conflict would be lamentable, and, if oft repeated, would be disastrous in its consequences. This was fully realised by the framers of the scheme, but was inevitable as the Indian Universities Act of 1904 vests the executive government of the University in the

Syndicate and makes the Senate the ultimate authority upon all questions within the purview of the University. This emphasises the need for an entire reconstitution of the University, and affords convincing proof that a permanently satisfactory solution cannot be reached by engrafting an elaborate scheme for post-graduate studies upon a constitution not expressly designed for a great teaching university.

62. Then, again, the scheme for post-graduate studies is entirely separated from the arrangements for undergraduate teaching. The disadvantages of such a complete separation at this stage are too manifest to require elaboration. Under the system now in force, there are two sets of Boards of Studies, one to deal with undergraduate courses, the other with post-graduate courses. There are in reality also two sets of Faculties, one set consisting of the Faculties of Arts and Science, the other set consisting of the Post-Graduate Councils in Arts and Science. If this cleavage in the University were to be made permanent, the result might be even more disastrous to the cause of education than the sharp division of colleges into self-contained compartments. This element of inherent weakness in the scheme appears to have been fully realised by the framers themselves; but there was no escape possible under the Act of 1904. The rigidity of the present constitution made it impossible, without recourse to legislation, so to reorganise and expand the existing Faculties and Boards of Studies as not only to ensure the presence of recognised teachers thereon in their own right, but also to give them a determining voice in the control of higher teaching by the University. This, again, points to the conclusion that the true remedy is, as we shall have occasion to suggest, not an amendment of the present constitution but a reconstitution of the University on an entirely new basis.

63. Lastly, the apprehension has been expressed that the post-graduate system, if it is allowed to develop apart from the colleges, may affect their status and prestige and permanently imperil their efficiency. Although the new scheme has not yet been worked in a manner likely to lead to results so disastrous, yet it is undeniable that there are elements of risk, and if in course of time, the post-graduate teachers are completely or even in a large measure dissociated from proper undergraduate work, a serious blow may be struck against the development on right lines of university education in this Presidency. The University, we

are convinced, can prosper in Calcutta only as a university of colleges. This result can be achieved only by mutual trustful co-operation between the University and its colleges ; and a domination of either factor over the other would be absolutely destructive of harmonious and fruitful conjoint action. Such a unification, however, is impossible under the existing constitution. The University is now the master of the situation and dominates the colleges instead of regarding them as partners in a great national undertaking. At the same time, it cannot be overlooked that a partnership is possible, only if the partners are worthy of full confidence ; in other words, the colleges must be entirely reconstructed, turned into places of genuine university work, relieved of the embarrassing task of what is, in a large degree, miscalled undergraduate teaching but is essentially higher school work, strengthened by a realisation of true ideals of academic work, and fully equipped to play their proper part in a powerful teaching university. This again points to the necessity for a new synthesis between the University and its colleges preceded by a radical reconstitution of both the elements.

64. There is one final point, which, though mentioned last, is by no means of the least importance. The new scheme leaves untouched the difficult question of adequate post-graduate instruction in places outside Calcutta, for the obvious reason that no satisfactory solution was possible without far-reaching changes beyond the scope of the Post-Graduate Committee, namely, the ultimate foundation of new teaching universities in selected centres of intellectual life. We have said enough to indicate that the post-graduate scheme, though possessing many admirable features and furnishing a satisfactory solution of many difficulties, does not debar an extensive survey of the entire situation and the evolution of a comprehensive scheme of university development and reconstruction such as will be outlined in later chapters of this report.

V.

65. It is not a matter for surprise that in a purely examining university such as Calcutta was under the Act of 1857, no systematic facilities for research appear to have been organised by the University before 1893. In that year, an important alteration was made in the rules relating to the award of the studentships which had been founded on the basis of the munificent donation of two lakhs of rupees made to the University on the 9th February 1866 by Mr.

Premchand Roychand of Bombay. The studentships, which were of the annual value of Rs. 2,000 (subsequently reduced to Rs. 1,400 on account of reduction of interest on the securities) and were tenable for five years, had, up to that time, been awarded on the result of an examination in a variety of subjects in arts and science and were competed for by the most distinguished graduates in those faculties within a prescribed time-limit ; in other words, the studentships were utilised to encourage the acquisition rather than the advancement of learning. In 1893, however, the Senate decided that the studentships should thenceforth be awarded for the promotion of research. The examination was held as usual ; but the condition was imposed on the successful candidate that he must, at the end of the second year, produce evidence that he had been engaged on original investigation ; and as the studentship was awarded for a term of five years, such reports were required to be submitted annually till the expiry of the term. Under this system, several important papers were published by the holders of the studentships and some of these are contained in the series published by the University Press and known as 'University Studies'. In 1908, a further change of a fundamental character was introduced. The studentships were no longer to be awarded for a term of five years, but two studentships were to be awarded annually, one in literary subjects, the other in scientific subjects, each tenable for three years, and, as before, of the annual value of Rs. 1,400. The examination on the basis of which the studentships had hitherto been awarded was at the same time abolished. It was ruled that every candidate (who must have passed the examination for the degree of master or doctor in any Faculty) should submit an application, stating his academical distinctions, the subject in which he had specialised, the research or investigation he had made in the selected subject or in any allied branch of knowledge, and the subject in which he intended, if elected to a studentship, to carry on special investigation or research. Every candidate was further required to produce a thesis dealing with the subject in which he had carried on or intended to carry on research. The applications in the literary subjects and in the scientific subjects are, under the rules, referred to two special Boards, and on the report of each Board of Examiners, the Syndicate makes the award. The successful candidate is then required to submit, at the end of each year of his studentship,

a report on the work or investigation upon which he has been engaged, and the studentship is continued, only if the report is adjudged satisfactory by experts. On the other hand, if it is proved to the satisfaction of the Syndicate that a student has undertaken no research or investigation or has abandoned or has otherwise acted in contravention of the terms upon which the studentship was granted, the Syndicate may at any time suspend the payment of the stipend. This system has now been in force for ten years, and a good many original papers have been published by successive students in literary or scientific periodicals or in the series of 'University Studies.'

66. Between 1893 when the first alteration in the rules for the award of the Premchand studentship was made and 1908 when the rules assumed their present form, two important endowments were created for the promotion of original research. In 1901, Mr. William Griffith, Barrister at Law, left the University a bequest of Rs. 26,000, to be applied for such purpose as the University might determine. The University decided to institute an annual prize, to be called 'The Griffith Prize,' for the encouragement of advanced study in science and letters, to be open to all persons who had at any time been admitted to the degree of bachelor in any Faculty in the University. It was further decided to award the prize in science and letters in alternate years. Candidates for the prize are required to submit an essay or a record of research work in some department of science or of letters, as the case may be, and each candidate has to send his essay or record of work under a distinguishing motto, his name not to be disclosed but contained in a sealed envelope with the motto outside. Since 1902, the prize has been awarded to many competitors, although there have been some years when the examiners were obliged to pronounce that no candidate had shown sufficient merit to entitle him to the prize. The prizes have been awarded for original work on a variety of topics, literary and scientific, which include such widely diversified subjects as reciprocation, double refraction, binary stars, parasites, catalysis, Emerson, work and wages, mediæval school of Indian logic, surgical instruments of the Hindus, science of medicine in the Atharva-Veda, philosophy of Patanjali and early European writers in Bengal. Many of these essays have been published, either by the authors themselves or by the University.

67. In 1903, Mr. Raj Narayan Mitra, Barrister at Law, created an endowment for the promotion of original research in Indian economics; but though there have been numerous competitors, the prize appears to have been awarded only twice during the last fifteen years.

68. In 1908, when the jubilee of the University was celebrated, the Senate decided to set apart a sum of Rs. 30,000 to establish what is called the Jubilee Research Prize Fund. Out of the income of the fund, two prizes may be awarded every year, each prize to consist of a gold medal of the value of Rs. 150 and a sum of Rs. 350 in cash. The prizes are awarded, one for research in scientific subjects and the other for research in arts subjects. The subjects for the prizes are annually prescribed by the Syndicate, on the recommendation of the members of the Senate. The prize has been successfully competed for thrice during the last ten years.¹ It will be noticed that there is a fundamental distinction between the terms for the award of the Griffith Memorial Prize and the Jubilee Research Prize, namely, for the former, the candidate is allowed to choose his own subject, for the latter, the candidate has to submit a thesis on a subject prescribed by the University. Apparently, the subjects which have been prescribed for the Jubilee Research Prize have not attracted capable competitors.

69. In the same year, Mr. Sarat Kumar Lahiri placed at the disposal of the University the copyright of his publication known as 'Selected Poems' for the creation of a fund for the maintenance of a research fellowship in the history of the Bengali language and literature. The first appointment to the fellowship was not made till 1913, by which date a sufficient sum had accumulated to the credit of the fund to render possible the election of a Fellow. The holder of the fellowship, Mr. Dines Chandra Sen, the author of well-known works on the history of the Bengali language and literature, is required to devote himself to the investigation of the history of the Bengali language and literature and to deliver annually a course of not less than twelve public lectures embodying the results of his investigation. Further mention will be made of the subject of these lectures in the next chapter.

¹ The subjects for investigation were—

(i) Origin and history of the Bengali alphabets;

(ii) Comparative philology of the Bengali dialects;

(iii) A statistical enquiry into the state of vision of Indian students in Calcutta, especially with reference to the prevalence of myopia at different ages and investigation of the factors supposed to influence the progress of myopia.

70. In 1912, Maharajah Sir Manindra Chandra Nandy of Kasimbazar gave the University Rs. 20,000 for the promotion of research in Indian mathematics and astronomy by the publication of texts and translation of unpublished works on those subjects. A scheme was drawn up by the late Dr. Thibaut to give effect to the wishes of the founder; but his death has caused a temporary interruption in the work of publication.

71. In 1912, the late Sir Tarak Nath Palit established research studentships in connexion with the chairs founded by him and these are awarded only to distinguished graduates in physics and chemistry. Sir Tarak Nath Palit also created an endowment for the award of scholarships to advanced students in science to enable them to carry on research or investigation abroad, that is to say, out of India. The continuance of the war, however, has made it impossible for the University to make awards out of this fund. In 1913, Sir Rash Behary Ghose established research scholarships in connexion with the chairs founded by him, and these also are awarded to distinguished graduates in applied mathematics, physics, chemistry and botany. Important papers have been published by some of the research students under the Palit and the Ghose Trusts. We shall revert to this matter in the concluding section of this chapter.

72. Here it may be mentioned that in 1906, when the new regulations were made, the University instituted the degrees of doctor of philosophy and doctor of science to encourage research among its distinguished graduates. These degrees are obtainable only by research. The regulations provide that the thesis of the successful candidate for either of these degrees must be published by the University and several such theses are included in the series of university studies already mentioned.

73. It is worthy of note that in 1912 Mr. Onauthnath Deb created an endowment for the annual award of two gold medals open for competition to all lady graduates of the University. One of these is awarded for the best essay written in Bengali by a lady graduate on a historical or biographical subject, while the other is awarded for the best poem in Bengali by a lady graduate on a prescribed subject. There have not been very many competitors for these medals and they appear to have been awarded only once, in 1912.

74. It may be convenient to mention here very briefly the endowments held by the University for the promotion of research in

the professional Faculties of Medicine and Law. In 1889, the committee appointed to raise a suitable memorial to Dr. Coates, formerly Principal of the Calcutta Medical College, created an endowment for the award of a prize for original research in medicine. The successful candidate is required to devote himself to the investigation of the properties of a selected medicinal drug. It is somewhat disappointing to find that the prize has been awarded only three times during the last quarter of a century, and that nearly a dozen years elapsed before it attracted a single competitor. In 1906, the committee appointed to raise a suitable memorial to Maharaja Sir Lachmeswar Singh of Durbhangha created an endowment for the award of a scholarship for the promotion of original research in medicine. This prize has been awarded only twice since its foundation.

75. When we turn to the Faculty of Law, we find that in 1902 Mr. Jogendra Chandra Ghose created an endowment for the award of a research prize in comparative Indian law. This prize appears to have been awarded only twice since its foundation. In 1911 Mr. Onauthnath Deb, whose name we have already mentioned in another connexion, created an endowment for the institution of an annual prize to be awarded for the promotion of research in law. There have been frequent competitors for this prize, but it has been awarded only thrice. In 1916, the Salehjee brothers founded an endowment for the promotion of study and research in Muhammadan law by the publication of texts and translations. A scheme has been drawn up, but no publications have yet been issued. Further reference will be made to these endowments in Chapter XXII.

76. We have now described the growth and the present condition of the facilities for research within the domain of the University itself. But it is useful to outline in this connexion the conditions of award of the research scholarships instituted by the Government of Bengal in 1900 for the encouragement of original research. Each scholarship is of the value of Rs. 100 a month and is tenable for a period of three years. Ordinarily, two scholarships are awarded annually to those students who propose to carry on original research in scientific subjects including such branches as natural and physical science, chemistry, mathematics, and one scholarship is awarded for research in literary subjects including such branches as languages, comparative philology, epigraphy, geo-

graphy, philosophy, history, archaeology and anthropology. Each candidate is required to submit his application, through the head of the institution in which he read last, to the Director of Public Instruction, and to produce evidence that he had passed the examination for the degree of master or doctor in any faculty within three years prior to the date of his application. Upon a scrutiny of all the applications, with the aid of experts, the Director decides upon the names of the successful candidates. The scholars are considered to be under the direct control of the Director of Public Instruction in all matters relating to their work and discipline. Although these scholarships have now been instituted for 18 years, very few of the scholars have published any record of original research or investigation. On the other hand, not a few have, during the term of their scholarship or immediately after the expiry of their term, taken to a non-educational professional career or to Government service. One of the rules for the award of the scholarship is to the following effect:—"The desirability and the method of publication of any of the original researches made by graduate scholars will be decided on from time to time by Government, and no research scholar, while holding the scholarship, will have the right of publishing the results of his research, professedly as the work of a Government research scholar, without the sanction of the Government." A rule of this description is obviously desirable to prevent the publication of immature pieces of *research work* or investigation; but apparently it has been read by the research scholars themselves as an indication that they are not expected to publish any work at all. These scholarships, we understand, are awarded by the Government without any reference to the university authorities. Co-ordination is manifestly desirable in this sphere, and when the University is reconstituted, these scholarships should be awarded by some organisation in the University, precisely in the same manner as the research prizes, medals, and studentships awarded out of university funds or endowments. This organisation should replace the Syndicate and may fittingly consist of scholars of high academic standing.

VI.

77. We shall conclude this chapter with a brief account of the establishment of the University College of Science. On the 15th

June and 8th October 1912, Sir Taraknath Palit executed two trust deeds in favour of the University of Calcutta, whereby he made over to the University money and land of the aggregate value of Rs. 15 lakhs for the promotion and diffusion of scientific and technical education in Bengal and the cultivation and advancement of science, pure and applied, amongst his countrymen. For this purpose he directed the establishment of university professorships of science, as a first step towards the foundation of a University College of Science and Technology. The first trust requires the immediate creation of two professorships or chairs, one of chemistry, the other of physics. The founder stated that, as his object was the promotion and diffusion of scientific and technical education and the cultivation and advancement of science, pure and applied, amongst his countrymen by, and through, indigenous agency, the chairs must always be filled by Indians, that is, persons born of Indian parents as contradistinguished from persons who are called statutory natives of India. He further directed that the professors elect might be required to receive special training abroad before they entered upon the discharge of the duties of their offices. He also directed that if the income of the endowed properties should exceed the amount required to meet the expenses for the maintenance and upkeep of the chairs, the surplus of the income might be applied to the payment of scholarships or stipends to such advanced students for the degrees of master of science or doctor of science as might receive training or carry on research under the Palit professors. Under the second trust, the income was to be applied in aid of and for the better carrying out of the trusts mentioned in the first deed. There was a further direction that a sum of one lakh of rupees was to be set apart and invested so as to constitute a fund for the award of scholarships for advanced students in science to enable them to carry on research and investigation abroad, that is, outside India. The management of the trusts was vested in a governing body consisting of the Vice-Chancellor as *ex-officio* President, the Director of Public Instruction, Bengal, the Deans of the Faculties of Science and Engineering, four members of the University nominated by the Senate, two of whom at least must be representatives of Calcutta colleges under Indian management, affiliated in science, four nominees of the founder, and two representatives of the professorial staff to be elected by them annually from amongst themselves. The University



accepted the trusts and undertook to provide from its own funds suitable lecture rooms, libraries, museums, laboratories, workshop and other facilities for teaching and research and to spend a sum of not less than 2½ lakhs of rupees towards the construction of permanent and substantial structures and their proper and adequate equipment as laboratories on the premises known as Parsi Bagan (92 Upper Circular Road).

78. The two trusts of Sir Taraknath Palit were followed by a gift of Rs. 10 lakhs by Sir Rash Behary Ghose on the 8th August 1913 for the promotion of scientific and technical education and for the cultivation and advancement of science, pure and applied, amongst his countrymen by, and through, indigenous agency. The founder directed the establishment of a chair in each of four subjects, *viz.*, applied mathematics, physics, chemistry and botany with special reference to agriculture. As in the case of the Palit chairs, the Ghose chairs may be held only by Indians who may be required to receive special training during a period of not less than one year and not more than two years under specialists in Europe, America, Japan or any other place outside India, so as to enable them to receive a thorough theoretical and practical training in their special subjects. To each of the professors are attached two research students who receive a stipend of Rs. 75 a month. The management of the Ghose trusts is vested in a Board consisting of the Vice-Chancellor as President *ex-officio*, the Director of Public Instruction, Bengal, the Deans of the Faculties of Science and Engineering, the professors of applied mathematics, chemistry, physics and botany, four representatives of Calcutta colleges affiliated in science and under Indian management and three nominees of the founder. The Ghose endowment was accepted by the Senate subject to the condition that adequate provision would be made for laboratories, museums, workshops and appliances and all other requisites essential for the due discharge of their duties by the professors and for original investigation by the professors and the students attached to them.

79. The duties of the Palit and Ghose professors are defined as follows:—

- (a) to carry on original research in their special subjects with a view to extend the bounds of knowledge and to improve, by the application of their researches, the arts, industries, manufactures and agriculture of this country;

(b) to stimulate and guide research by advanced students and generally to assist them in post-graduate work so as to foster the growth of real learning amongst our young men.¹

80. The university authorities approached the Government of India for substantial help to enable them to carry out the purposes of these two endowments, but the application was refused. The Government of India however agreed to allow Rs. 12,000 annually to be spent for the maintenance of the laboratories, out of the recurring grant of Rs. 65,000 made to the University in 1912. The result has been that the University has been obliged to rely upon its unaided resources to fulfil its obligations under the trust deeds. These resources are derived chiefly, if not exclusively, from the surplus of examination fees realised from candidates at the various examinations. The University has spent in this manner an aggregate sum of seven lakhs of rupees. The building at 92 Upper Circular Road forms a fine structure and accommodates the physics and chemistry departments. A room has been set apart for the use of Dr. Brahmachari who has carried on important investigations in bio-chemistry. Two rooms have been assigned to experimental psychology. But it is probable that, with the growing needs of that department of study, separate accommodation may have to be provided elsewhere. The original plans, we may add, included provision for residential accommodation of the university professors, their chief assistants and selected research students. There is ample room in the grounds for this purpose. But it was decided to hold the scheme in abeyance when it was found that the Government of India was not in a position to assist the University. Within the last year, steps have been taken to organise a biological department at 35 Ballygunj Circular Road which was the residence of the late Sir Taraknath Palit. The handsome buildings on that site have been completely renovated and arrangements are in progress for the erection of botanical and zoological laboratories in one of the buildings. The other building will be occupied by three professors, two of botany and one

¹ Under the terms of the Palit Trust, the professors are required to arrange for the adequate instruction of students for the degrees of bachelor of science with honours, master of science and doctor of science. The University has not, up to the present time, found it necessary to arrange for B.Sc. honours instruction, which is undertaken by several of the affiliated colleges in Calcutta.

of zoology. It may be mentioned here that in 1917 the University created two new chairs, one for botany and the other for zoology. The emoluments of these professors are paid out of the surplus of the income of the University. It will be observed that the University College of Science is still in the process of formation and considerable sums will be needed for its development on modern lines in such a variety of subjects as applied mathematics, physics, chemistry, botany and zoology. The question of the management of the institution has already engaged the attention of the university authorities, because the University College of Science, though dependent to a large extent upon the income of the Palit and Ghose endowments, is an institution of a more comprehensive scope. We set out in an appendix the outlines of the scheme recently sanctioned for the governing body of the College of Science.¹

¹ Printed in the volume of appendices to this report, where will also be found a description of the grounds and buildings.

CHAPTER XVI.

ORIENTAL STUDIES.

I.

1. The University of Calcutta, when reconstituted as a powerful teaching university and however comprehensive its scope, is not likely to be regarded with pride and satisfaction by the people of Bengal unless it exhibits a special excellence in the domain of oriental learning. In a later chapter, we shall examine the question how far and in what manner the activities of the University may be developed and enlarged for the promotion of oriental learning. In the present chapter, we shall outline the history of the progress of oriental learning in this Presidency in the past so as to justify our ultimate recommendations in this department. It will be convenient to arrange the materials available in two broad divisions: first, Sanskritic and other non-Islamic studies, and, secondly, Islamic studies. There are points of contact between the two divisions, but we shall endeavour to make the statements self-contained as far as practicable without undue repetition. This mode of treatment is necessary, for whereas the problem of the encouragement of Sanskrit learning, whether pursued on indigenous or western lines, has to be approached chiefly from the point of view of scholarship, the problem of Islamic studies includes that of the madrassahs which is vitally connected with the general educational advancement of the Muslim community. This aspect of the madrassah problem cannot be justly ignored, and it would be plainly unwise to sacrifice a full historical review of the subject for the sake of apparent uniformity of treatment.

II.

(A) Outline of the history of Sanskrit studies, 1792-1823.

2. After the civil administration of the country had passed into the hands of the East India Company and British courts had been instituted throughout the province, it was found essential to attach a maulvi to the court of every English judge, who was

presumably ignorant of the people, their manners and the ~~of~~ of the laws which had been so long administered to them ~~under~~ rule of the Nawab. It was also found equally necessary to ~~use~~ the services of a pandit who might assist the judge with his ~~explanations~~ on questions of Hindu law. The time had not yet arrived when authoritative treatises on Hindu and Muslim law were to be made accessible in an English garb. The maulvi and the pandit were thus in a manner indispensable, but competent scholars, prepared to accept service, were by no means abundant. To supply this want, and partly also to reconcile Musalmans to British rule, Warren Hastings established in 1781 the Calcutta Madrassah for the education of their children in Arabic and Persian. Seven years later, in 1791, a Sanskrit college was founded in Benares, (which was at the time included in the Presidency of Bengal, and was then, as now, the great stronghold of Sanskritic learning) by the British Resident, Jonathan Duncan, one of the many noble-minded Englishmen who had at heart the true welfare of the people of this country. The Madrassah at Calcutta had a grant of landed property estimated to produce an annual income of Rs. 30,000. The Sanskrit College at Benares was granted during the first year Rs. 14,000 for recurring expenditure, but during the second year the amount was raised to Rs. 30,000 annually.

3. The attitude of the Government towards the religion of the Hindus and Musalmans was very friendly. It was ordained that the students in the two institutions should receive instruction in the way prescribed in their sacred books, and it is significant that in the case of the Sanskrit College a rule was adopted that the teachers must all be Brahmins, except the professor of the science of medicine who might be a Vaidya. The doctrine of religious neutrality had not yet been formulated; and the Government not only did not interfere in the least degree with the religious institutions and customs of the people, but encouraged them. The East India Company was, indeed, supposed to be the guardian of the temples and derived a large income from the imposition of a tax called the pilgrims' tax. It was not till the time of Lord Auckland that this was regarded as an unsuitable tax for a British Government to levy; it was abolished in 1840.

4. At the time of the foundation of the Sanskrit College at Benares for the promotion of Sanskritic learning which was in fact identical with Brahminic learning, there existed in all parts of the province

a considerable number of private institutions where the indigenous learning was assiduously cultivated, principally by scholars of renown who were too orthodox to approach non-Hindu rulers for patronage. During the times of disorder and trouble which preceded the assumption of administrative authority by the East India Company, these institutions had already begun to *languish through the lack of adequate support from the public and the State.* This was vividly realised by the British administrators, as is amply indicated by a minute recorded on the 6th March 1811 by Lord Minto, then Governor-General, and the members of his Council. The minute bears the signature of the eminent orientalist, Henry Thomas Colebrooke, and is of abiding interest and special value. The following extract, which probably suggested the provision of Section 43 of Chapter 155 of Statute 53, George III (1813), will be read with interest :—

" It is a common remark that science and literature are in a progressive state of decay among the natives of India. From every inquiry which I have been enabled to make on this interesting subject, that remark appears to me but too well-founded. The number of the learned is not only diminished but the circle of learning even among those who still devote themselves to it, appears to be considerably contracted. The abstract sciences are abandoned, polite literature neglected, and no branch of learning cultivated but what is connected with the peculiar religious doctrines of the people. The immediate consequence of this state of things is the disuse, and even actual loss, of many valuable books ; and it is to be apprehended that, unless Government interfere with a fostering hand, the revival of letters may shortly become hopeless from a want of books or of persons capable of explaining them. The principal cause of the present neglected state of literature in India is to be traced to the want of that encouragement which was formerly afforded to it by princes, chieftains and opulent individuals under the Native Governments. Such encouragement must always operate as a strong incentive to study and literary examinations but especially in India, where the learned professions have little, if any, other support. The justness of these observations might be illustrated by a detailed consideration of the former and the present state of science and literature at the three principal seats of Hindu learning, namely, Benares, Tirhoot and Nadia. Such a review would bring before us the liberal patronage which was formerly bestowed, not only by princes and others in power and authority, but also by the zamindars, on persons who had distinguished themselves by the successful cultivation of letters at those places. It would equally bring to our view the present neglected state of learning at those once-celebrated places, and we should have to remark with regret that the cultivation of letters was now confined to the few surviving persons who had been patronised by the native princes and others under the former Government or to such of the immediate descendants of those persons as had imbibed a love of science from their parents. It is seriously to be lamented that a nation particularly distinguished for its love and successful cultivation of letters in other parts of the Empire should have failed to extend



under the authority of the Governments within which the same shall be situated."

It is plain that the literature to be revived and improved was the then existing literature ; that the learned natives of India to be encouraged were those who were already learned, not those who might become so by the introduction and promotion of a knowledge of the sciences. Consequently, the sum directed to be appropriated was applicable in part at least to the revival, improvement and encouragement of the existing learned institutions of the country.

6. The policy thus boldly outlined was inaugurated principally through the influence of the eminent administrators and missionary leaders who were pioneers in the great movement for opening out the treasures of eastern learning to western minds—scholars and investigators of the type of Sir William Jones, Henry Thomas Colebrooke, Horace Hayman Wilson, William Hay Macnaghten, Sir John Harington, William Sutherland, William Carey, John Marshman and William Ward. There were, however, other men of considerable eminence who were doubtful as to the wisdom of the cultivation of ancient Sanskritic learning, as becomes manifest from a reference to the conflicting opinions recorded by Sir John Harington and Lord Moira.¹ Happily this divergence of opinions did not stand in the way of liberal grants for the advancement of Sanskritic learning through the agency of indigenous teachers. The position thus was that, while the institution at Benares was entirely maintained by Government, the numerous academies or *tôls* interspersed throughout the country, many of them in receipt of generous grants from the State, also continued to flourish.

(B) *The Sanskrit College, 1824-1917.*

7. It was at this stage in the progress of oriental studies that in 1824, during the administration of Lord Amherst, the Sanskrit College at Calcutta was established for the preservation and cultivation of the literature, religion and laws of the Hindus. It commenced its career as an organised Sanskritic *tôl* or academy with 55 stipendiary students and eight professors to teach Nyaya (logic), Smriti (law), Darsana (philosophy), Vyakarana (grammar),

¹ Reports on Vernacular Education by Adams, edited by John Long, pages 310-311. Adams gives an admirable analysis of the grounds urged at that time to justify the adoption of measures for the improvement of Sanskrit instruction and emphasises the immense influence exercised by Sanskrit pandits on the Hindu community.

In fact, it is only by a combination of the whole-time teachers of the University, the lecturers at the Sanskrit College, and some of the best Sanskrit teachers in other institutions, that it has been found possible to provide an adequate staff to meet the needs of the M.A. students. The point to be emphasised, however, is that the members of the college staff still continue to exercise, as they always did in the past, a strong influence in the organisation and promotion of higher Sanskritic studies in the University.

9. The second department of the institution is recognised by the University as a school qualified to present candidates at the matriculation examination. This department consists of ten classes of which the lower five are conducted on a vernacular basis and the upper five on Anglo-Sanskritic lines. But although this department forms a recognised school, in so far as Sanskrit is concerned, special subjects are taught in addition to the university course. These special courses of study have been graduated from the lowest classes of the school to the highest in such a way that a regular student may obtain a thorough mastery in all important branches of Sanskrit learning if he remains attached to the institution from the lowest class of the school to the highest class of the college department.

10. The third department of the college, namely, the oriental department, makes provision for instruction in grammar, literature, rhetoric, poeties, logic, law, philosophy, Vedas, astronomy. The oriental department maintains its unique character by teaching a larger variety of subjects than any other institution of the kind in Bengal; it sends forth from year to year a continuous succession of scholars to different parts of India to further the spread of Sanskrit education and serves as a model to which all the other *cols* in Bengal aspire to conform. It may be observed here that since the new regulations of the University came into force, a change of a fundamental character has been introduced in the method of study for the higher degree examinations, as instruction is now given by Anglo-Sanskrit scholars in conjunction with genuine orthodox pandits. We thus have a happy union of the critical researches of western scholars with that traditional learning which has never found its way fully into text-books in popular use.

11. The paramount necessity for such combination of the best scholars of the eastern and western types is realised when we examine the character of the course prescribed for the M.A. degree examination in Sanskrit. Every candidate is required to take

eight papers at the examination ; four of them are identical for all. They are devoted to the Rig Veda, the grammar of Panini, the principles of comparative philology with a special reference to classical and vedic Sanskrit and Prakrit, the philosophy of Sanskrit grammar and, finally, the history of Sanskrit literature, including a general survey as also a selected department. In respect of the remaining four papers, each candidate has to choose one out of nine available groups, which deal respectively with the following branches of Sanskrit learning :—

- (i) Literature,
- (ii) Vedas,
- (iii) Smriti and Mimamsa (law and interpretation),
- (iv) Vedanta,
- (v) Sankhya and Yoga,
- (vi) Nyaya and Vaisesika,
- (vii) General philosophy,
- (viii) Prakrit,
- (ix) Epigraphy with ancient history and geography.

It is not necessary for our present purpose to examine in detail the syllabus for each of the groups. It is sufficient to state that the entire range of subjects chosen is marked by elaboration and specialisation. The texts and commentaries recommended for special study are such as require for their full understanding a knowledge of the traditional interpretation as well as the results of modern criticism and research. We refer to this aspect of the activity of the University in order to emphasise the importance of the preservation and cultivation of the most meritorious products of Sanskrit learning in the past. It is in the fitness of things that in the Department of Oriental Studies in a great Indian university, ample provision should be made for the advanced study of the various departments comprehended in Sanskrit learning ; and if learning of this character is to be conserved and maintained, it is possible to achieve the object only by a combination of the best talents amongst the representatives of indigenous learning and the most capable exponents of western criticism thereon.

(C) The Sanskrit tōls and their reorganisation, 1878-1918.

12. After this review of what may be called Anglo-Sanskrit studies in the Sanskrit College in conjunction with the post-graduate classes in the University, we resume our narration of the progress of Sanskrit learning on strictly orthodox lines, made partly in the

Sanskrit College and partly in the *tôls* which flourish throughout the country. We have stated already that the Sanskrit College was originally established as a model institution for *tôls* of this character, and this has continued to be the ideal of its *Tôl* Department. During the period antecedent to the establishment of public examinations for various purposes by the British administrators of the country, the pandits were accustomed to confer titles on their pupils, very often without a formal examination. Indeed, in early days, the practice of written tests was unknown. The examinations took the form of oral debates and discussions in assemblies of pandits which frequently met in some public place. This was the practice prevalent in Nadia, which was for many centuries, as it is at the present day, the most celebrated place of Sanskrit learning in this Presidency. A similar practice was followed also in other centres of Sanskrit learning, such as Vikrampur, Bhatpara, Darbhanga and Puri. There is no definite information available as to the exact period when formal written examinations became usual in these places of Sanskrit learning ; but between 1870 and 1890, associations or sabhas were founded for the conduct of examinations of students who had pursued their studies at a *tôl*. The result of the establishment of a variety of associations, each of which conferred its own titles and maintained its own standards, led, however, as might easily have been anticipated, to much confusion.

13. In 1878, on the suggestion of the late Pandit Mahesh Chandra Nyayaratna, at that time Principal of the Sanskrit College, the Government of Bengal introduced the system of title examinations in Sanskrit. The fascination of titles awarded on the result of public examinations was quite as great in the case of orthodox students of Sanskrit as of students of western learning in the University, and scholars from the remotest parts of Bengal, Bihar and Orissa eagerly sought admission to the examinations. Various titles, such as Nyayaratna, Kavyaratna, Smritiratna, were awarded to the students to indicate their proficiency in different branches of Sanskrit learning. In 1884, the old titles were abolished and a uniform title was introduced. The successful candidates were awarded the title of *Tirtha* which was subjoined to the subject in which they passed, for instance, *Veda Tirtha*, *Kavya Tirtha*. There can be no doubt that the introduction of the Government title examination gave a great impetus to the advancement of Sanskrit learning.

As a natural result, Government was pressed from time to time to increase the grants made to *tôls*, and in 1891, Pandit Mahesh Chandra Nyayaratna was deputed to make a survey of Sanskrit *tôls* in Bengal. The object of the inspection was to ascertain by personal enquiry which of the *tôls* in the districts visited by him had the highest reputation, to report the details of arrangements for instruction and residence in the *tôls*, and, on the completion of the investigation, to submit recommendations for the encouragement of teachers and pupils at these institutions. The survey was careful and comprehensive as is obvious from the report published by the Government of Bengal in 1892.¹

14. The result of this important enquiry was the foundation of non-pensionable allowances to the teachers of selected *tôls* and the institution of rewards in the form of small stipends to be awarded annually to teachers and pupils on the results of public examinations. Directions were also given for the reorganisation of the examination system, with the result that three examinations were established, *viz.*, (i) the Adya (or preliminary), (ii) the Madhya (or intermediate) and (iii) the Upadhi (or title). These examinations were at first left to be conducted by recognised associations; but the arrangements did not work well and in 1897 they were placed under the control of the principal of the Sanskrit College, who, by virtue of the position thus acquired, thenceforth came to be called the Registrar of Sanskrit examinations. The paper-setters and examiners were selected by the Principal in his capacity as Registrar, and the same printed questions were sent for use by the different associations. The result of this attempt at uniformity was much dissatisfaction, as the eminent pandits whose pupils sat for the examinations had no voice in the determination of the courses or the appointment of examiners.

15. On the 9th August 1906, a memorial, signed by many influential gentlemen headed by the Maharajah of Darbhanga, was presented to the Lieutenant-Governor. The memorialists suggested the desirability, in the interests of Sanskrit culture in the country, of associating competent persons, official and non-official, as also representatives of the principal associations interested in the cause of indigenous Sanskrit learning, with the Principal of the Sanskrit

¹ Report on the *tôls* of Bengal, Bihar and Orissa by Mahamahopadhyaya Mahesh Chandra Nyayaratna, Principal, Sanskrit College (Calcutta, May 1891). (Bengal Secretariat Press, Calcutta, 1892.)

College, in the work of framing courses, conducting examinations and awarding stipends and scholarships on their results. An informal conference of Sanskritists which was thereafter held under the presidency of the Director of Public Instruction strongly advocated the proposal to constitute an advisory and examination board. On the 19th June 1908, the Government of Bengal established such a body which was called the Board of Sanskrit Examinations. The Board consisted of eleven members, of whom six were eminent orthodox pandits, each of them a recognised representative of a definite branch of Sanskrit learning. The other five were Sanskritists versed in western methods. The establishment of this Board gave a great stimulus to the study of Sanskrit in the *tôls* as will be obvious from the following tabular statements:—

1905-1908.

Number of candidates during four years before the establishment of the Board.

Year.	First examination.	Second examination.	Third examination.	TOTAL.
1905	2,961	1,626	316	4,904
1903	2,718	1,455	260	4,442
1907	2,583	1,391	300	4,274
1908	2,483	1,450	302	4,235

1909-1912.

Number of candidates during four years after the establishment of the Board.

Year.	First examination.	Second examination.	Third examination.	TOTAL.
1909	2,870	1,516	335	4,760
1910	2,941	1,706	387	5,034
1911	3,347	2,129	477	5,953
1912	4,068	2,701	784	7,553

16. In 1913 the Government of Bengal convened a conference to determine what steps should be taken for the further encouragement of Sanskrit learning in the Presidency of Bengal, which had been reconstituted with effect from the 1st April 1912. The conference was asked to deal specially with the following questions:—

“(1) Whether separate organisations should be created for the encouragement and control of Sanskrit learning at Calcutta and Dacca, or whether

a single organisation with its centre in Calcutta should serve the whole province.

(2) What should be the constitution and functions of the organisation or organisations.

(3) Whether any substantive reforms were required in existing systems for the grant of titles, stipends and rewards.

(4) What should be the policy of the Government in regard to the encouragement of *tôls*.

(5) Whether a department of Brahminic studies, combined with instruction in English, should be established in connexion with the Sanskrit College."

17. The conference which met in Calcutta in February 1913 made definite recommendations on all the points mentioned. It is not necessary for our present purpose to set out these recommendations in detail; but it is interesting to note that the pandits who were members of the conference were unanimously of the opinion that degrees should be granted in Sanskritic studies on a system similar to that proposed for Islamic studies by the Dacca University Committee. The pandits from Eastern Bengal and Assam further desired that a department of Sanskrit studies should be constituted as a portion of the new Dacca University, whilst the pandits of Western Bengal and Bihar and Orissa urged its inclusion in the University of Calcutta as a branch of the Sanskrit College. The pandits were also emphatically of opinion that there should be only one organisation for the control of Sanskrit studies on orthodox lines throughout the province and that such organisation should be distinct from the University and should contain substantial representation of indigenous learning. They further urged that there should be a large deliberative Convocation and a Council to be the sole executive authority, the two together to form a corporation which might be styled 'The Calcutta Sanskrit Association.'

18. Although this report was submitted in 1913, no action was found possible till a year ago, by reason of the outbreak and continuance of the war. On the 21st January 1918, the Government of Bengal issued a resolution on the subject in the local *Gazette*, giving effect to the chief recommendations of the conference. A Convocation of 500 pandits was to be established, namely, 450 from Bengal and 50 from Assam. There was to be an Executive Council consisting of 20 members, besides the President and the Secretary. Of the 20 ordinary members, 15 were to be representatives of orthodox Sanskrit learning, 5 from Calcutta, the Presidency and the Burdwan Divisions, 5 from the Dacca, Rajshahi and Chitt-

gong Divisions, 3 from Assam, all nominated by Government, together with two other pandits elected by the Convocation, one to represent West Bengal pandits, the other to represent East Bengal pandits. The remaining five members of the Council were to be scholars trained in western method. The Principal of the Sanskrit College was to be *ex-officio* Secretary and the President was to be appointed by the Government of Bengal. The Calcutta Sanskrit Association has been thus constituted and is entrusted with the conduct of examinations, the award of titles and certificates to successful students, the distribution of stipends to pupils and rewards to teachers on the results of the examinations; the duty has also been imposed on it of advising Government in regard to all matters connected with indigenous Sanskrit learning inclusive of the distribution of grants-in-aid to Sanskrit *śiksās*.

19. Between 1913 when the conference met and 1918 when the Government of Bengal published the resolution last mentioned, the territorial jurisdiction of the Board of Sanskrit Examinations had been considerably curtailed. On the 23rd February 1914, the Government of Bihar and Orissa appointed a committee to consider the question of the development, improvement and control of the institutions for indigenous Sanskrit studies which existed in Bihar and Orissa. Advantage was taken of the report of the conference appointed by the Bengal Government in 1913, and on the 19th October 1915 the Government of Bihar and Orissa constituted the Bihar and Orissa Sanskrit Association to consist of a Convocation and a Council on the plan outlined above. The figures for the number of candidates at the Bengal examinations for three years before and three years after the formation of the Bihar Association are interesting. The sudden decline in 1914 is unexplained.

1913-1915.

Number of candidates for three years before the constitution of the Bihar Board.

Year.	First examination.	Second examination.	Third examination.	TOTAL.
1913	4,045	3,260	916	8,231
1914	3,163	1,902	594	5,661
1915	2,498	2,320	759	5,577

1916-1918.

Number of candidates for three years after the constitution of the Bihar Board.

Year.	First examination.	Second examination.	Third examination.	Total.
1916	1,476	1,321	571	3,368
1917	1,523	1,341	615	3,479
1918	1,569	1,328	665	3,502

20. The position thus is that the Government of Bengal have, as the result of experience of many years, organised an association for the development, improvement and control of indigenous Sanskrit learning throughout the Presidency. These studies are pursued in a very large number of institutions¹ maintained on strictly orthodox lines by members of hereditary families of pandits. They have demanded (and their claim has been in a manner admitted) to be closely associated with the supervision of the educational work in which they and their predecessors have for generations devoted their talents. It is plain that the nature of these studies, the method in which they are cultivated and the social status of the orthodox scholars who keep alive the traditional elements, make it impossible that the work of supervision should be entrusted exclusively to a band of scholars, however learned, who have been trained and whose minds are steeped in western ideals. At the same time, it does seem lamentable that scholars who have been so thoroughly trained in eastern learning should be denied all opportunity to profit by western learning even if they should desire to be associated therewith. The question then is, is it possible to devise any method by which they may be brought into touch with western culture at their choice, without interference with their traditional methods and ideals of learning? This we shall consider in Chapter XLII. But for the correct appreciation of our recommendations, it is necessary that we should have an idea of the nature of the courses of study presented in these examinations.

¹ The latest list of *tols* published by the Government of Bihar gives the number as 1,553. This does not include the *vars* or *gurukuls*.

21. As already stated, there are three grades of examinations leading up to the final title which is conferred on the successful candidates. Every candidate is at each stage examined in one selected branch of knowledge, and the elaborate nature of each of the courses may be realised from a description of their classification.¹ To take one illustration : logic is regarded as a subject by itself ; but, even here, there are six distinct sections, (two of them on Jain logic) any one of which may be selected by a candidate. It is open to a candidate to present this subject for the preliminary, the intermediate and the final examinations. The courses are so arranged that by the time the student has reached the end of the final stage, he must have acquired a thorough mastery of the fundamental texts and of all the chief commentaries in existence relating to the particular branch. Again, philosophy is recognised as a subject by itself ; but here there are four different groups, one of which alone may be taken by a candidate at each successive stage of the examinations. Here also the observation applies that the course, taken in its entirety, demands a knowledge not merely of the fundamental texts but also of all the commentaries of any repute, some of them recondite in the extreme. The philosophy groups thus includes in different sections, vedanta, sankhya, mimamsa and a general survey of all the systems. When we come to law, we find three distinct sections, namely, the ancient law-givers, the modern schools of law, and the system peculiar to Orissa. In the case of Veda also, there are three distinct groups corresponding to the Rig Veda, the Yajur Veda and the Sama Veda. In the cases of purana and astronomy, there is only one section in each department. Probably, the subject most elaborately treated is the department of grammar, where courses are prescribed in ten different sections. We must here guard against a possible misconception. From what we have stated, the inference may perhaps be drawn that the courses have been so framed as to secure depth at the sacrifice of breadth ; but such a conclusion would be wholly erroneous. The actual examination is no doubt restricted to a special branch or even a special school or section of a branch of knowledge ; but it is impossible for a candidate

¹ As the examinations are held annually, at least one year must elapse before a candidate who has passed one of these examinations in a subject can appear at the next higher examination in that subject. But candidates who have passed the title examination in a philosophical subject may be permitted to appear at the second examination and at the title examination in a second subject in the course of the same year. There is a great disparity of age amongst the candidates at these examinations.

to pass any of these examinations, without an adequate knowledge of many cognate subjects in which he is not formally examined. To take one illustration: it is impossible for a candidate to pass in the department of *kavya* or literature without an adequate knowledge of grammar, rhetoric, poetics and some logic; for the commentaries even on poetry are in many places unintelligible to a student wholly ignorant of the rules and technical terms of Indian logic. Again, a candidate who takes up a school of law or a school of philosophy cannot possibly acquire a thorough mastery of the selected subject, unless he has a considerable knowledge of grammar, literature and logic, for there is hardly a commentary on law or philosophy which can be read even in fragments without an adequate knowledge of the subjects mentioned. The truth is that, though every student who studies for the title examination in a particular subject is ultimately examined only in his selected subject, still it is essential for him to acquire knowledge of several subsidiary or correlated subjects in which no examination is held. The questions in his special subject are, indeed, framed on the express assumption that he has a working knowledge of every subject needed to acquire a mastery of the special topic selected; and, above all, he must be an expert in Sanskrit composition, as the answers are required to be given in Sanskrit. It is interesting to find that a system of examinations in Pali also has been instituted since 1915 on the model of the title examinations in Sanskrit. Here, again, there are three distinct departments of study referring respectively to the *Sutta pitaka*, the *Vinaya pitaka* and the *Abhidhamma pitaka*, and, as in the case of Sanskrit, while depth of knowledge is tested, the assumption is made that the candidate has a general knowledge of subsidiary and cognate topics. It may be stated finally that an optional paper in English is set for such candidates as desire to take it up for examination. In this paper passages are set for translation from vernacular into English and from English into vernacular, as also questions on grammar and composition. A small fraction of the candidates (about 10 per cent.) take this paper. This is probably attributable to the circumstance that no arrangements for instruction in English exist in the *tôls*, many of which flourish in places in the interior where no instruction in English is available. But there are signs of a growing desire for knowledge of English amongst the class of candidates who present themselves for the title examination in Sanskrit.

(D) *The study of Pali, Tibetan, Chinese, Japanese and Zend.*

22. Besides provision for Sanskrit studies in the University of Calcutta, it is manifestly desirable that adequate arrangements should be made for the cultivation of other Asiatic languages, a knowledge of which is indispensable for investigation into the history and culture of the country in ancient and mediæval times. Amongst such languages, an important place must plainly be assigned to Pali, Tibetan, Chinese and Japanese. The religious books of the Buddhists were composed in the Pali language, and there is a vast literature in Pali which serves to throw a flood of light upon the condition of India, religious, social and political, from the sixth century before Christ to the twelfth century of the Christian era. Pali as a possible subject for examination had found a place for many years in the university regulations, but it was not till 1898 that the present principal of the Sanskrit College took the M. A. degree in that subject with high distinction. It is significant that this examination, the first held in the University, had to be conducted by examiners resident in England and Germany. Since then the study of Pali up to the standard of the B.A. degree examination has been slowly but steadily fostered in several of the affiliated colleges. The University has also directly taken an active part in the arrangements made to facilitate the spread of a knowledge of Pali amongst undergraduates and graduates. For several years past, the University has employed lecturers to impart instruction in Pali to such undergraduate students as were anxious to take up the subject, but for whom no arrangement could be made by their respective colleges. The University has also made arrangements for the instruction of graduate students in Pali. In the early stages, the work was undertaken by a Mahratta scholar, and subsequently by the principal of the Sanskrit College single-handed, in addition to his other heavy duties ; but since the creation of new authorities for the organisation of post-graduate studies, a rapid advance has been made in this direction.

23. The first step taken by the Board of Higher Studies in Pali was to recast the syllabus for the M.A. examination so as to enable students to specialise. Eight papers are now set at this examination four of which are identical for all students. The first two are devoted to the fundamental scriptures of the Buddhists, the

third deals with Pali and Prakrita grammar, while the fourth covers the history of Buddhism in its various phases. As regards the other four papers, candidates are allowed the choice of one out of four groups. One of these groups is literary, another philosophical, the third epigraphical, and the fourth is devoted to Mahayana literature and philosophy. It is obvious that a course of this character, so varied and so extensive, cannot be adequately treated without an efficient staff which must include specialists on the literary, philosophical, archaeological and socio-religious sides. Besides the Principal of the Sanskrit College, the staff now includes several graduates of distinction, each of whom has taken a first class in Pali at the M.A. examination and one of whom was the first Indian to be admitted to the degree of Doctor of Literature in the University of London for an extensive thesis on the philosophy of Buddha. We observe further that the staff includes three Buddhist monks, who are familiar with the traditional learning in the domain of Buddhistic philosophy and religion, and represent both the Burmese and the Sinhalese schools. We believe this is the first attempt made in an Indian university to bring home to its students a knowledge of Pali literature and philosophy through the agency not only of scholars trained in western methods but also of competent teachers of the indigenous type.

24. There is a special reason why the University should place facilities within the reach of its graduates and undergraduates for the cultivation of the Tibetan language. It is a matter of history that, from the seventh to the twelfth century, Indian missionaries went to Tibet in order to spread Buddhistic learning and culture and carried with them books which have since disappeared from this country.¹ But though the ravages of time have destroyed the originals of these valuable works which at one time existed in India, many of them still survive, sometimes in the original tongue, sometimes in Tibetan translations, in the country of the Lamas. The Tibetans composed, centuries ago, two extensive encyclopedias which embody priceless information on Indian philosophy and tradition and form a valuable storehouse of Indian learning. To mention one illustration only ; the history of Indian logic prepared

¹ Journal of the Asiatic Society, 1906. Annual Address.

by Dr. Satis Chandra Vidyabhusana and published by the University is based largely on materials drawn from these sources and has radically modified the views of scholars on the antiquity and extent of the subject as developed in this country in bygone ages. These encyclopædias were printed in Tibet by the block print method, and copies, very often imperfect, exist in some of the famous libraries of Europe. The University Library in Calcutta possesses a complete set of these two encyclopædias, and there are other Tibetan books in the university collection which would furnish ample material to students of this recondite subject. The University has also attempted to foster the growth of Tibetan studies by the issue of books of selections drawn up by Sir Denison Ross and Dr. Satis Chandra Vidyabhusana. A Tibetan-English dictionary, suitable for students is ready for immediate publication and a valuable Tibetan grammar prepared by Mr. Hanna has already been published. But the University had not, till quite recently, made formal arrangements for actual instruction in Tibetan to be imparted to its graduates and undergraduates. Within the last few months, however, the University has appointed Dr. Vidyabhusana as instructor in Tibetan and has offered a scholarship to the best graduate who would undertake the study of Tibetan and at the same time take up the new course in Ancient Indian History and Culture for the M.A. degree examination. The University has also taken another very important step. Dr. Vidyabhusana has been appointed to draw up a topical index of the two encyclopædias mentioned and considerable progress has been made with the preparation of this work, which will be published in Tibetan and English. We desire to emphasise the importance of a work of this character which will greatly help scholars to explore the contents of these voluminous encyclopædias, comprising material so vast as to furnish ample occupation to an army of scholars and investigators for a generation. It is essential that the labours of the pioneers in this field should be lightened by the publication of a guide to their contents. Another important work in Tibetan composed by the famous Indian logician, Nagarjuna, of which an English version has been prepared by Major Robert Campbell, now acting as British resident at Gangtok, Sikkim, is in the press and will shortly be published by the University. Finally, arrangements are in progress for the appointment of a learned Lama as second instructor in Tibetan, so as to make available to advanced

students the traditional views in different departments of Tibetan philosophy.

25. Two other languages of great importance to investigators in the field of ancient Indian history and culture are Chinese and Japanese. The records of the Chinese travellers who, during the early centuries of the Christian era, made pilgrimages to India as the birth place of Buddha, his religion and his philosophy, are amongst the most interesting and reliable records of the history of these early ages. The writings of three of these travellers have been familiar to scholars for more than three quarters of a century and have been translated into more than one European language. But there are similar records by other travellers which have never been brought to the notice of oriental scholars in Europe or in India. Besides this, a flood of light is thrown on Buddhistic philosophy by classical Chinese and Japanese writers, and the University took the important step, some years ago, of appointing a reader in Buddhistic philosophy from Chinese sources. These lectures by Mr. Yama Kami, which have been published, have attracted considerable attention amongst students of Buddhistic philosophy. The University has now gone a step further and has appointed three instructors in Chinese and Japanese and in Buddhistic philosophy to be investigated from Chinese and Japanese sources. Two of the instructors are Japanese scholars who have come to this country to acquire a knowledge of Sanskrit and to study Indian philosophy from Sanskritic works. It is fortunate that the University has been able to utilise the services of scholars of this type who, while they acquire a knowledge of Sanskrit literature and philosophy from a first-hand study of the originals, are at the same time able to give to university students and lecturers instruction in Chinese and Japanese and in the history of Buddhism from Chinese and Japanese sources..

26. Another language of considerable importance in the investigation of early Indian culture is Zend. The professor of comparative philology, a Parsi scholar of distinction, has undertaken to give instruction in this subject, and an annotated and critical edition of select passages from the Zendavesta is ready for immediate publication. We cannot but regard it as a hopeful sign that the whole of the money needed for the printing of the volume has been provided by Mr. R. D. Mehta, a well-known Parsi citizen of Calcutta.

(E) *The study of ancient Indian history and culture.*

27. Mention must be made in this connexion of the elaborate steps which have been taken by the University for the promotion of the study of ancient Indian history and culture from original sources. In 1912 the University decided to set apart the income derived from Sanskrit publications and thereby to constitute a fund for the establishment of a chair in ancient Indian history and culture. Dr. George Thibaut was the first occupant of the chair which, after his death, has been filled up by the appointment of Mr. D. R. Bhandarkar. When the new regulations for the organisation of post-graduate teaching came into force, steps were taken to establish the degree of master of arts in ancient Indian history and culture. This elaborate course is open only to graduates who possess a competent knowledge of Sanskrit and are able to refer to the sources in original. Eight papers are to be set in the examination ; four of these are identical in the case of all candidates and are devoted to the general history of Vedic and epic India, the political history of the post-epic period and the historical geography of ancient India. As regards the other four papers, candidates are allowed the choice of one out of four groups. The first group deals with archeology and requires on the part of candidates a knowledge of Indian epigraphy, paleography, fine arts, numismatics, ethnography and ancient architecture. The second group includes social and constitutional history, embracing a survey of social life, manners, customs and ceremonies, economic life, administration and ethnology. The third deals with religious history, which includes Vedic, epic and puranic religions as also Buddhism and Jainism. The fourth group treats of Indian mathematics and astronomy. No serious attempt has ever been made, before this, to provide instruction in such a comprehensive manner in so many topics connected with ancient Indian history and culture. The staff specially selected for this work includes several young graduates of distinction. This was inevitable, inasmuch as the subjects mentioned have never been formally studied in a university, and the staff for the department has really to be created and adequately trained. Some of the lecturers have already published notable contributions in their respective special subjects in journals of learned societies and periodicals of recognised standing. The University has also wisely determined to offer four special scholarships tenable for two years each to regular students.

to encourage the most deserving amongst them to undertake study and research in this department.

(F) *The study of Indian vernaculars.*

28. No description of the oriental studies in the University can be deemed complete unless it includes a statement of the steps taken to promote the scientific study of Indian vernaculars. We have considered in another chapter the difficult question of the use of the vernacular as the medium of instruction. Whatever divergence of opinion may exist upon that subject, it is manifest that if vernaculars are to be steadily employed for the purpose of instruction, a determined and organised effort must be made to promote their scientific study by the best talent available in the country. We are glad to find that the authorities of the University have been fully alive to their obligations in this respect. Shortly after the new regulations promulgated by the Government of India came into force in 1906, the University appointed Mr. Dines Chandra Sen as reader to deliver a course of lectures on the history of Bengali language and literature from the earliest times down to the middle of the 19th century. These lectures were delivered in 1909 and constitute an extensive survey of the entire subject. As a corollary to the action thus taken by the University, Mr. Sen was appointed to prepare a book of typical selections from Bengali authors from the earliest ages to the middle of the 19th century. This work, which is based on an examination of manuscript materials and represents the result of years of devoted labour, enables the reader to take a rapid and comprehensive survey of the character of Bengali literature from its rise to the time when it began to liberate itself from the influence of English literature. In 1913 Mr. Sen was reappointed reader to deal with the subject of Vaishnab literature of mediæval Bengal. The lectures on this interesting subject have already been published by the University. Meanwhile, in 1908, Mr. Sarat Kumar Lahiri, a well-known publisher of this city, had made over to the University the copyright of one of his publications with a view to create an endowment for the encouragement of the study of mental and moral philosophy. The residue of this fund was, with his consent, subsequently applied for the institution of a research fellowship in the history of the Bengali language and literature, and Mr. Sen was appointed the first research fellow. Mr. Sen, who was the first Indian to receive a literary

pension from the Secretary of State for India in Council in recognition of his historical researches in the domain of Bengali language and literature, has applied himself to the examination of various departments of Bengali literature, and has delivered annually a course of lectures for five successive years. Mr. Sen who has just been reappointed for another term has thus already covered a varied field of Bengali literature including such topics as the Ramayan, the life and teachings of the great religious reformer, Chaitanya, the folk-lore of Bengal and the earliest type of Buddhist literature which flourished in this Presidency. One of the courses of lectures has been published by the University ; the other four are in the press and would have been published by this time but for the difficulties created by the war.

29. Apart from the encouragement which the University has thus given towards the study of Bengali language and literature, steps have recently been taken for the institution of an M.A. degree in Indian vernaculars. The scheme is of far reaching importance and deserves full description here.¹ Every candidate must take up two approved vernaculars (as principal and subsidiary subjects respectively) and two basic languages ; he must also acquire a knowledge of the comparative philology of the vernaculars. Four papers are to be set at the examination on the principal vernacular, two papers on the subsidiary vernacular, one paper on the basic languages and one paper on the philology of the vernaculars. The first of the four papers on the principal vernacular is to be devoted to the history of its literature, including a general survey as also a prescribed period or movement. The second and third papers will be on old, mediæval and modern texts and unseens. The fourth paper will require the candidate to write two essays (at least one of them in the principal vernacular) on topics connected with a prescribed period of literary or linguistic history and a selected movement, literary, scientific, social or religious. In the case of the vernacular chosen as the subsidiary subject, two papers will be set on easy texts and unseens, and on the elements of grammar, philology and literary history. The paper on the two selected basic languages will include questions on easy prescribed texts, as also simple questions on grammar. The paper

¹ The regulations for the M. A. degree in Indian vernaculars are set out in the volume of appendices to this report.

on philology will be devoted to Indo-Aryan or other prescribed branch of philology, only in so far as it elucidates the origin and development of Indian vernaculars. Finally, as in the case of English and comparative philology, students with prescribed qualifications will be allowed, under carefully defined conditions, to offer a piece of research work in lieu of the written examination in two papers. We are glad to find that the framers of the scheme have fully realised that, in order to ensure its success, the provision of adequate arrangements for thorough instruction in these subjects is of vital importance. Arrangements have accordingly been made to enlist the co-operation of competent scholars in the initiation of this great undertaking.

A new Board of Higher Studies will also be constituted for Indian vernaculars. On this Board will find places all the university teachers who will be appointed for the purpose. There will, we trust, be no lack of capable workers in this attractive field; and it is a hopeful sign that in recent years graduates of considerable distinction have been awarded the Premchand Roychand Studentship, the Jubilee Research Prize and the Griffith Memorial Prize for investigations in such subjects as the origin and history of the Bengali alphabet, the early European writers in Bengali, Bengali literature in the nineteenth century, phonology of modern Bengali and comparative philology of the Bengali dialects.

30. It is not necessary to undertake detailed criticism of this scheme which breaks absolutely new ground and has not yet been put to a practical test. Attention may, however, be drawn to some important features. The scheme is elastic and is capable of modification in the light of experience. The vernaculars are to be studied from a comparative standpoint, both linguistic and literary, critical and historical. Candidates must at the same time acquire facility in vernacular composition so as to be able to write an essay in the vernacular on a subject of their choice. Scope is also afforded to qualified students for profitable research in what has been up to the present time an inadequately explored field. We notice further that the vernaculars may include not merely those of the Indo-Aryan but also those of the Dravidian family, and there is no reason why, from the point of view of Muslim students, Urdu should not find a place in the list. Indeed, as circumstances exist in Bengal, Urdu as a principal vernacular together

with Bengali as a subsidiary vernacular would form a happy combination for Bengali speaking Musalmans. Finally, the scheme contemplates the appointment of university teachers in the principal vernaculars; the preparation of courses of study and the conduct of the examinations will consequently be placed in the hands of experts. The scheme is manifestly capable of immense possibilities and we trust that it will be wisely and vigorously carried out.

31. A scheme of this character, as will be obvious even to superficial observers, cannot be successful, unless materials for study and research are made easily accessible to teachers and students. We are glad to find that the University had, even before this scheme was accepted, taken in hand the preparation of suitable works from this point of view. We have already mentioned the comprehensive volumes of typical selections in Bengali prepared by Mr. Dines Chandra Sen some years ago at the instance of the University. The preparation of similar typical selections in several of the chief Indian vernaculars has already been taken in hand. The list of volumes under actual preparation includes Assamese, Uriya, Hindi, Marathi, Gujrati, Prakrit and Pali, and the services of competent scholars from different parts of India have been secured in the prosecution of this great task.¹ It is not a matter for surprise that such a scheme as this should excite considerable interest amongst promoters of oriental studies in the University. The Maharajah of Kasimbazar has offered to place at the disposal of the University a sum of Rs. 10,000 to constitute a fund for the publication of vernacular texts, and several smaller endowments have been offered for the award of prizes, medals and scholarships to students who may distinguish themselves in this department of study. This determination on the part of the University to promote the scientific study of the Indian vernaculars, to encourage research in vernacular literatures and languages, to foster their growth by the publication of scholarly editions of texts and by historical investigations of their origins, early development and ramifications into a variety of dialects, opens out a field of activity so extensive in scope and so well calculated to rouse intellectual curiosity, that we trust it will attract the sympathetic co-operation of all friends and promoters of education, official as well as non-official.

¹ The details of the scheme will be found set out in full in the proceedings of the Executive Committee of the Council of Post-Graduate Teaching in Arts, dated 29th June, 9th August, and 5th September, 1918.

32. We cannot leave this topic without mention of a difficulty which has arisen in the case of members of what are known as hill tribes or aboriginal races. The wave of modern education has reached these backward communities and the more ambitious students amongst them are steadily seeking admission into the University. Khasis, Garos, Lushais and Mundas have already come to the front, though students of these classes are placed at a considerable disadvantage even at the matriculation stage. In the first paper in English which they are required to take up, 70 out of 100 marks are assigned to passages for translation from the vernacular into English. They are also required to pass an examination in composition in a vernacular language or the alternative paper in English composition or in French or in German. Now the university regulations, though they recognise the vernaculars of these hill-tribes for the purposes of the first paper in English, do not recognise those vernaculars for the purposes of composition. The consequence is that such students are obliged to take up an alternative paper in English, which is primarily designed to test the attainments of students whose vernacular is English. This disadvantage remains, although in their case the University has, by a modification of the regulations, dispensed with the requirement that each student at matriculation should have learned a classical language. If the present arrangements continue, it is probable that the progress of modern education amongst these backward communities will be seriously retarded. We are not unmindful of the existence of champions of the theory that the vernaculars of aboriginal races do not deserve recognition from civilised people. But they forget that full justification has not yet been found for the complete supersession of the culture of one race by that of another. The situation has already become pressing and will no doubt claim serious attention before long. The evidence before us, however, is not sufficient to enable us to formulate a solution applicable to all such cases.

(G) Subsidiary studies.

33. Here a brief reference may be directed to the arrangements recently made in the department of post-graduate studies for the study of comparative philology. The University established in 1912 a chair of comparative philology and the first two occupants

have been scholars who had specialised in the Indo-Aryan branch. Recently, lecturers have been appointed who are interested in the philology of the Indian vernaculars, and during the present session a course of lectures has been delivered on the philology of the Bengali language. This obviously presents an interesting field for study and investigation and should fittingly be linked up with the department for the study of the Indian vernaculars.

34. It is plain that a comprehensive study of the branches of knowledge we have hitherto mentioned is impracticable without some knowledge, on the part alike of students and teachers, of modern languages which embody the researches of western scholars in these subjects. We are glad to find that the University has arranged for classes in French, German, Dutch, Modern Tibetan, Chinese and Japanese for the benefit of advanced teachers and students, and the eagerness with which admission is sought into some of these classes by university teachers and research students is a hopeful sign of the success likely to be achieved under judicious management.

III.

(A) *An outline of the history of madrassahs in Bengal from 1781 to 1907.*

35. In this section we give a *résumé* of the history of madrassahs in Bengal from the foundation of the Calcutta Madrassah down to the year 1907.

When the British first established themselves as the governing power in Bengal, the Musalmans were still supreme in the administration of the country. On the 12th August 1765 Shah Alum made over to the East India Company the formal grant of the *Divani* (the collection of Government revenue). This grant effected no actual change in the political condition of the Musalmans; the official language according to the treaty continued to be Persian and the fiscal and judicial administration was carried on in accordance with Muslim law. Realising the need for an institution which would train officers qualified in Muslim law, Warren Hastings in 1781 established the Calcutta Madrassah. But the effect of the transfer of the *Divani* upon the Musalmans of Bengal was thus stated by Warren Hastings in the minute in which in 1785, on

the eve of his departure from India, he described the purposes for which he had founded the Madrassah :¹—

" Since the management of revenues has been taken into our hands it has chiefly been carried on by the English servants of the Company, and by the Hindoos who from their education and habits of diligence and frugality possess great advantages over the Muhammadans in conducting all affairs of finance and accounts. In consequence of this change the Muhammadan families have lost those sources of private emolument which could enable them to bestow much expense on the education of their children and are deprived of that power which they formerly possessed of endowing or patronising public seminaries of learning."

36. In 1828 the British Government directed a general examination of the title deeds on which real estate was held throughout Bengal. There followed eighteen years of special legal investigation, as the result of which a considerable amount of landed property was resumed by Government. The resumption seriously affected those Muslim educational institutions—and there were many such—which were supported by endowments. Those were the days of the educational controversy between the Orientalists and the Anglicists. The Directors' despatch of the 29th September 1830 favoured the promotion of English education. A recent Bengali Muslim writer has described this despatch as "the beginning of the close of the chapter of the supremacy in India of Persian and Arabic culture."² On the 2nd February 1835 Lord Macaulay wrote his minute, which was adopted by the Government of Lord William Bentinck in their resolution of the 7th March 1835. This resolution directed among other things that no stipend should be given to any student who might hereafter enter any institution for native learning under the superintendence of the Committee of Public Instruction. The Musalmans of Calcutta presented a petition of protest, signed by about 8,000 persons, in which they charged Government with encouraging English and discouraging Muslim and Hindu studies with the evident object of the conversion of India to Christianity.³ The protest is in striking contrast to that which Ram Mohan Roy addressed to Lord Amherst, Governor-General, in

¹ Revenue Consultations, 21st January 1785, reproduced in *Bengal Past and Present*, Volume VIII, No. 15, pages 109-111.

² *History and Problems of Moslem Education in Bengal*, by M. Azizul Huque (Calcutta, 1917), pages 17-18.

³ Syed Ameer Ali's article entitled *A cry from the Indian Mahomedans* published in the *Nineteenth Century*, August 1882.

1823 against the establishment by Government of the Sanskrit College¹ instead of an institution for western learning. By Act XXIX of 1837 Persian was finally abolished as the language of judicial and revenue proceedings. Thenceforth all official business was to be conducted either in English or in the appropriate provincial dialect which, so far as Bengal was concerned, was Bengali. The Musalmans of Bengal had as a community always eschewed the use of the Bengali language, which was not taught in any of their educational institutions. They felt that the Act forced them to learn not only the language of their foreign rulers but also the language of the subject races. And all this came about at a time when the minds of the Musalmans of Bengal were unsettled by reason of the resumption proceedings to which we have alluded at the opening of this paragraph.

37. The curriculum of the Calcutta Madrassah about the year 1833 was thus described by its Secretary. The period of study covered seven years and at the end of this period or earlier the successful student obtained a certificate. The course of study was :—first year—law and general literature including grammar; second year—law and arithmetic or algebra; third year—law and geometry; fourth year—law and, at the option of the student, either logic, rhetoric, metaphysics, natural philosophy, astronomy or theology; fifth year—law, including the regulations of Government and any one of the foregoing subjects which the student might select. The studies of the sixth and seventh years of the course were apparently on the same lines as those of the fifth year. The Committee of the Madrassah tried to make English compulsory and increased the stipends available for that branch of study from Rs. 2 to Rs. 5 a month. The result of this arrangement was, we are told, that the English school was filled with unwilling pupils who devoted too short a time to the study of that language.² When the Calcutta Medical College was opened in 1835,³ not a single Muslim student came forward who had even a moderate knowledge of English and consequently no Musalman was admitted. The num-

¹ The foundation stone of the Sanskrit College was laid on 25th February 1821, by John Pascal Larkins.

² Review of Public Instruction in the Bengal Presidency from 1835 to 1851 by J. Kerr, Chapter III, pages 76-97.

³ See also Chapter XXIII, paras. 5 and 6.

ber of students in the Calcutta Madrassah was at the time 118, of whom 38 were reading English. In addition to the Calcutta Madrassah institutions of the same character, though of a somewhat inferior standard, were established in other places. For example, the Madrassah at Murshidabad was maintained at an annual cost of Rs. 1,800, its teachers being mostly drawn from the Calcutta Madrassah.

38. In 1842 the discipline of the Calcutta Madrassah was reported to be 'loose and unsatisfactory.' The English classes held in the Madrassah continued to be almost entirely neglected by the students of the Arabic Department and to be generally unsuccessful. In 1847 Anglo-Arabic classes were opened for the exclusive benefit of the students of the Arabic Department, but these classes also failed. In 1850 the Council of Education asked Government to appoint a European principal of the Madrassah with duties and responsibilities similar to those in other colleges, with the exception that he should not be required to teach a class. Government agreed and Dr. Sprenger was appointed. Dr. Sprenger without reference to the Council of Education introduced certain changes into the studies and discipline of the institution, and serious disturbances ensued. The Council thereupon appointed a committee of inquiry and, after considering the report of this committee, the Council in 1853 recommended to Government that the English and Anglo-Arabic classes should be closed and that "in their stead an Anglo-Persian Department should be organised upon such a scale and with such an establishment as to afford the means of acquiring a thorough English education as far as the junior English scholarship standard."¹ Persian was to be taught simultaneously with English in the Anglo-Persian Department. The Council of Education summed up the general trend of their proposals as follows :—

"The whole aim of the Council, in the proposals offered in the present report in respect to the Muhammadan College is, while maintaining its distinctive character as an efficient seminary of Arabic instruction for the learned classes of that community, to infuse into it the same spirit of progress and of adaptation to the wants of the present time, which so honourably distinguish the Sanskrit College, under the superintendence of the singularly able and

¹ *Bengal Past and Present*, Volume VIII, page 99.

enlightened scholar,¹ under whose care, as its principal, the latter college has now the good fortune to be placed.”²

The approval of the Marquis of Dalhousie, then Governor-General of India, to these proposals was communicated to the Council of Education in 1853.

39. In the despatch of 1854³ the Directors of the East India Company expressed satisfaction with ‘the increasing desire of the Mahomedan population to acquire European knowledge.’⁴ They stated that the oriental colleges in Bengal appeared to be ‘in an unsatisfactory condition,’ that the scheme of study pursued was under consideration by the Council of Education and that the colleges should be placed upon such a footing as might make them of greater practical utility.⁵ In an earlier paragraph⁶ the Directors named the Sanskrit College and ‘the Mahomedan Madrassas’ in Bengal in a list of institutions which would “supply a considerable number of educational establishments worthy of being affiliated to the universities, and of occupying the highest place in the scale of general instruction.” Dealing further with the question of affiliated institutions,⁷ they recommended that provision should be made “in the oriental colleges, for sufficient instruction in the English and vernacular languages, so as to render the studies of each most available for that general diffusion of European knowledge which is the main object of education in India.”

40. The authors of the despatch did not foresee the difficulties involved in any attempt to bring madrassahs, institutions whose primary object was the imparting of a particular type of oriental culture, into the scheme of a university whose express purpose was the diffusion of western learning. At any rate, neither the Calcutta Madrassah nor any other madrassah was included within the Calcutta University scheme. In his recent book to which we have already referred, Mr. M. Azizul Huque suggests that “had the Madrassah in all its branches been incorporated with the uni-

¹ Pandit Iswar Chandra Vidyasagar (para. 7, above).

² *Bengal Past and Present*, Volume VIII, page 102.

³ Chapter III, paras. 17—21.

⁴ Despatch of 1854, para. 82.

⁵ *Ibid.*, para. 90.

⁶ *Ibid.*, para. 37.

⁷ *Ibid.* — — —

versity system, with such modifications as might have been needed for the purpose, the Musalmans would not perhaps have been so backward as they are today;¹ and indeed had they been included, the whole subsequent history of the problem of the education of the Musalmans of Bengal might well have been very different.

41. In 1858 the Lieutenant-Governor of Bengal (Sir Frederick Halliday) called for a special report on the Calcutta Madrassah. A report was drawn up by Captain William Nassau Lees who was then principal. After considering this report Sir Frederick Halliday recorded a minute in which he recommended that the Madrassah, or rather the Arabic Department of it, should be abolished, that the Anglo-Persian Department should be retained, and that Arabic chairs should be created and attached either to the University of Calcutta or to the Presidency College. The Government of India did not agree to these proposals. Their view was that instead of abolishing the Arabic Department the reforms advocated by the Council of Education in 1853 should be vigorously carried out.² In 1861 a despatch was received from the Secretary of State approving the decision of the Government of India. But the condition of the Calcutta Madrassah continued to be unsatisfactory. In 1867 the Anglo-Persian Department was affiliated to the University of Calcutta as a second-grade college, but when the classes were opened six students only joined them. The following year the number fell to four and in 1869-70 the number was further reduced to three, all of whom left within the session.

42. In 1869 the Government of Bengal was once more constrained to appoint a committee to enquire into and report on the condition of the Calcutta Madrassah. One of the results of the recommendations of this committee was the closing of the college classes of the Anglo-Persian Department of the Madrassah and the inauguration of the arrangement (which still continues) whereby a certain number of Muslim students are admitted to the Presidency College on reduced terms.³

43. A memorandum compiled by Dr. Zia-ud-din Ahmad, which will be found in the volume of appendices to this report, contains an account of the origin and history of the Mohsin Fund. The buildings

¹ *History and Problems of Moslem Education in Bengal*.

² Para. 38 above.

³ See also Chapter VI, para. 57.

in which the Hooghly College is to this day accommodated was bought by Government out of this fund; and from the opening of the college in 1836 down to 1872 not only the Madrassah which was held in the building but also the college was maintained out of this fund. In 1872 the Government of Bengal recognised the grievance of the Musalmans of the Province arising from the appropriation of the endowment of the Mohsin Trust to the maintenance of the Hooghly College. To remove this grievance the Lieutenant-Governor of Bengal, at the instance of the Government of India who added a sum of Rs. 50,000 for that purpose to the provincial assignment for education, made the maintenance of the college a charge on provincial funds. The portion of the Mohsin Fund endowment which was thus released was devoted partly to the Hooghly Madrassah, partly to the establishment and maintenance of madrassahs at Dacca, Rajshahi and Chittagong, and partly to the provision of scholarships and stipends tenable by Muslim pupils in English colleges and schools. We have stated in Chapter VI that the maintenance of all these madrassahs has recently been made a charge on provincial funds and have shown how the Mohsin fund income, thus set free, has been used to increase the provision of scholarships and stipends available for Muslim students.¹

44. Mr. Ameer Ali (now the Right Hon'ble Syed Ameer Ali), in his evidence before the Indian Education Commission of 1882, gave the following description of madrassahs² :—

"A dead weight, however, seems still to press down the Muhammadan Community. The mistake which was committed in 1872 was not to make English compulsory on all students who sought middle class and high education. The consequence is that the only kind of education which is necessary to enable them to retrieve the ground they have lost within the last fifty years is in a most unsatisfactory condition..... I think it has been sufficiently proved by experience that the scheme devised by Sir George Campbell in 1872 to promote a purely oriental education among the Muhammadans in the eastern districts of Bengal, has proved a practical failure..... I think it right to mention here that, in my opinion, in all middle class and high schools and colleges, English should be made compulsory. The promotion among any class of Her Majesty's Indian subjects of a purely oriental study is fraught with many mischievous consequences."

¹ Chapter VI, para. 33.

² Report of Bengal Provincial Committee, page 210.

45. The education imparted in madrassahs Mr. Ameer Ali condemned unreservedly¹ :—

" Men so educated are turned out into the world to shift for themselves ; with no field for the employment of their energies ; utterly unable to make a living, and hopelessly ignorant of modern progress and culture, they form so many centres of discontent and disaffection. When disappointment is joined to religious bigotry, when starvation lends additional bitterness to the sense of wrong and injustice, it ought not to surprise any body to learn that these men look with some dislike upon those whom they believe to be the chief cause of their poverty, and whose motives of generosity they regard with distrust."

46. Mr. Ameer Ali also recommended before the Commission that the Calcutta Madrassah should be raised to the status of a college.² A central Muslim college at Calcutta, he thought, whose students might gather together to pursue the higher branches of study, where their requirements as to the knowledge of their own classics could be carefully attended to, was a matter on the necessity of which there could be no two opinions. He added that a purely Muslim college teaching up to the B. A. standard would become doubly necessary, if the Presidency College ever came to be disestablished.

47. But in raising his voice against the expenditure of public funds on purely oriental education Mr. Ameer Ali stood alone in Bengal. Nawab Abdul Latif Khan, in the course of his evidence before the Commission, expressed his satisfaction with the Calcutta Madrassah as it then was and his approval of the proposal of Sir George Campbell that the classical languages of Persia and Arabia should be taught to Musalmans in their own way so as to satisfy the requirements of their religion, their ideas of a liberal education, and the genuine demand which existed in the community for oriental learning for its own sake.³

48. In Upper India, on the other hand, chiefly through the influence of Sir Syed Ahmad Khan and the Educational Conference which he established in 1886, the spread of higher English education among Musalmans was much more rapid than in Bengal, in spite of the late introduction of English education into that part of the country. Purely oriental schools in the United Provinces were left to private enterprise. A number of madrassahs exist in Upper

¹ Report of Bengal Provincial Committee, pages 221 and 222.

² *Ibid.*, page 222.

³ *Ibid.*, page 215.

India, and some of them are reckoned to be the best of their kind in the country, but they are private institutions, mostly drawing no support from the public revenues. Sir Syed Ahmad Khan raised his voice against the establishment of the Oriental Department in the Punjab University. His apprehension was that such a department could never be a success and that it would be mainly patronised by needy young men who could not afford to defray the normal expenses of a college education and who went to an oriental college merely because it was cheaper.

49. From 1882 onwards, the English side of the Calcutta Madrassah grew in popularity, but no progress was made in madrassah education proper during the two decades which followed the Commission of 1882. In the second Quinquennial Review of Education in Bengal (1897-1902) the Director of Public Instruction said that the number of the Government madrassahs was unchanged but that the attendance had fallen from 1,067 to 1,628.¹ The Government was also aiding several of the privately managed madrassahs. The Government and aided institutions followed the same course as the Arabic Department of the Calcutta Madrassah; in some of them English or Bengali was taught as an optional subject.

50. One more effort was made to bring the Calcutta Madrassah and the madrassahs associated with it more into line with ordinary colleges and schools and more into touch with the requirements of modern life. In 1903 the Government of Bengal had before them a proposal that, from a certain stage in the course upwards, two different courses should be taught in the Arabic Department of the Calcutta Madrassah—one partly English and partly oriental, the other wholly oriental. This proposal was rejected, mainly because it was felt that, while a knowledge of English was to be acquired at the expense of oriental studies, the standard attained in that language would not be sufficiently high to justify the experiment. In a resolution, issued by the Government of Bengal on the 24th February 1903,² the view was expressed that, if a Musalman wished to learn English thoroughly, he should enter the Anglo-Persian department of the Calcutta Madrassah, in which Arabic and Persian were taught as optional subjects for the matriculation

¹ Chapter XI, page 55, para. 18.

² Supplement to the Calcutta Gazette, dated the 25th February 1903, page 232.

examination. In this Department no religious instruction is given.

(B) *The Conference of 1907-08 and its results.*

51. In 1906 Mr. (later Sir Archdale) Earle who was at the time Director of Public Instruction in Bengal moved the local Government to hold a conference of Muslim gentlemen on the subject of the institution of a title examination at the Calcutta Madrassah and of other problems in connexion with the education of Musalmans. The first meeting of the conference was held on the 16th December 1907 ; it was attended by about 50 members including representatives of the province of Eastern Bengal and Assam, the Secretary to the Board of Examiners, Calcutta, and the Principal of the Calcutta Madrassah.

52. The conference appointed three sub-committees, (i) to consider the institution of a title examination and the teaching of English in madrassahs, (ii) to consider the question of improving the education given in maktab, and (iii) to consider the question of the teaching of Urdu. The recommendations of the sub-committees were laid before the conference on the 22nd April 1908 and the whole proceedings were then summarised by the Director of Public Instruction and submitted to the local Government.

53. The Government of Bengal in its resolution No. 731, dated the 24th February 1903, had expressed its approval of a suggestion which had been made by a committee of a non-official conference of Muslim gentlemen that titles should be conferred after examination in special subjects such as literature, law and theology in the same way as titles are conferred on students of Sanskrit. Some revision of the madrassah curriculum particularly in regard to the introduction of history and geography and the teaching of *Tafsir* and *Hadis* (the interpretation of the Quran and the traditions), was advocated by the 1907-08 Conference. It was agreed that the courses in the madrassahs should be split up into three stages to be called junior or school classes extending over a period of six years ; senior or college classes extending over a period of five years ; title classes extending over three years. The title classes were to be opened in the Calcutta Madrassah only ; the junior and senior classes were to be taught in the Hooghly and

all other madrassahs which were allowed to send up candidates for the examination of Bengal madrassahs.

54. The courses in the junior classes included Urdu, Persian, Arabic, arithmetic, geography of the world with special reference to India, history of India and drill. In view of the fact that Urdu, while it was not the mother tongue of many students in some madrassahs, was the medium of instruction in general use, a considerable portion of the time available was allotted to the systematic study of that language. In connexion with the teaching of Persian, an attempt was to be made to introduce the direct method of language teaching. The books prescribed, though not wholly suitable, were the best that were then available. The syllabus in arithmetic was practically equivalent to the present matriculation syllabus. It is significant that the teaching of Quran was not included in the syllabus.

55. Mr. Earle in the letter in which he forwarded the proposal of the 1907-08 Conference to the Government of Bengal, gave the following explanation for calling the senior classes college classes :—

“ It is desirable that some explanation should be given on this point, because the claims of students to be considered as more than mere schoolboys are apt to be overlooked, and this leads to undesirable results. The right of students in the senior classes to be considered as college students is clear when it is explained that students of the fifth-year senior (or college) class read beyond the university M.A. courses in Persian or Arabic.”

56. Separate books were prescribed for Sunni and Shia students in respect of law and theology. The absence of such provision had operated to prevent Shia students from entering the madrassahs ; and though the number of such students was not expected to be large, it was considered desirable to make provision for them.

57. The courses in the senior classes included the revision of arithmetic, the first four books of Euclid, logic, rhetoric, philosophy, Muslim law and jurisprudence, the Arabic language and literature and the Persian language and literature: Persian was optional for students who took English.

58. For the title examination a student was expected to study a specialised course in one of the following subjects :—

- (1) Hadis (the traditions), Tafsir (interpretation of the Quran), Aqaid (theology), and the general history of Islam.

- (2) Fiqh (Muhammadan law), Usul (Muhammadan jurisprudence), and the general history of Islam.
- (3) Literature, rhetoric, prosody, and the general history of Islam.
- (4) Logic, philosophy, and the general history of Islam.

59. The question whether English should be made compulsory was thoroughly discussed and negatived. It was thought that a student who desired to learn English thoroughly must join the Anglo-Persian Department of the Calcutta Madrassah. It was arranged that English should be taught in the three top classes of the junior madrassah and in the five classes of the senior madrassah. The students in the title classes were not allowed to study English; it was considered either that they should have learnt English before or would be willing to postpone its study until later. A special two years course in English was recommended for students who had passed the senior fifth year class and for those who had taken the title course. In order to encourage the study of English, six scholarships of the value of Rs. 2 a month tenable for one year were to be created and made tenable by those pupils who took up English as an optional subject.

60. The question as to the standard of English received considerable attention at the Conference. The original proposal was that the teaching of English should be carried to a stage equivalent to the B.A. standard of the Calcutta University. Dr. (now Sir Denison) Ross, however, clearly showed in a note of the 3rd March 1908, a copy of which is attached to the proceedings of the fifth meeting of the sub-committee, that it was undesirable to specify the standard in terms of university attainments. He observed that it was an undoubted fact that the course of Muslim classics, as taught at the madrassahs, produced men of considerable culture; and that he personally knew at least half a dozen Musalmans, whose working knowledge of English was far in advance of that of the average B.A. in spite of the fact that they had never been near a high school or read for the matriculation examination. The standard to be aimed at was a thoroughly good working knowledge of English; and this would, it was thought, be acquired if, as proposed, a student studied English for three years in the three highest classes of the junior (or school) department and for five years in the senior (or college) department, along with

other subjects, and then underwent a special course of instruction in English only for a further period of two years.

61. Mr. Earle recommended that a madrassah student who had passed the senior madrassah examination and had taken English throughout his training from the proposed 4th year class of the junior department upwards, and who had passed an examination in English, at the end of the special two years' course referred to in paragraph 59 above, should be considered by Government as equivalent to a man who had taken a university degree.¹ These proposals were generally approved by the Lieutenant-Governor of Bengal,² but the special course has not been established.³ The Conference reviewed the strength and qualifications of the staffs of the various madrassahs and made definite proposals for their improvement. They recommended the initiation at the Calcutta Madrassah of tutorial classes in Arabic and advocated for the purpose of these classes the importation of an Arabic scholar from Egypt who, it was proposed, should be recruited outside the grades of the educational services on a five years' agreement on a salary of Rs. 600 a month. The additional cost involved in these proposals was Rs. 9,720 a year for the Calcutta Madrassah, and Rs. 9,456 for the Hooghly Madrassah.

62. Mr. Earle's proposal was that the general rule that Urdu was not to be considered a medium of instruction for Musalmans in the Presidency and Burdwan Divisions should be retained; but that, in exceptional places where the bulk of the Muslim population spoke Urdu as their vernacular, instruction should be imparted through the medium of that language. It was pointed out that such an arrangement was in accordance with the principles underlying the scheme of vernacular education, *viz.*, that children should be taught through the medium of their own vernacular.

63. There remained only the question of the appointment of teachers of Urdu as a second language. No matter of principle was here involved. In 1889 the Government of Bengal had approved of Urdu being taken up as a second language in schools in Bengal,

¹ Letter from the Director of Public Instruction, Bengal, no. 246-T, dated 10th June 1908.

² Letter from the Government of Bengal, no. 3855, dated 15th August 1908.

³ Para. 65 below.

wherever an Urdu teacher could be provided. It was pointed out at that time that unless Muslim boys learnt something of Urdu in the lower classes of high schools, they were compelled to begin Persian while they were still totally unprepared for the intelligent study of that language. The Government of Bengal emphasised the desirability of additional teachers being appointed for Urdu teaching.

64. The Lieutenant-Governor of Bengal (Sir Andrew Fraser) accepted the scheme which had been worked out by the Conference and requested the Director of Public Instruction to submit definite proposals for the gradual introduction of the scheme as funds permitted. He considered, however, that the costly experiment of the importation of an Arabic scholar from Egypt could not be justified in the state of provincial finances which then prevailed.

(C) The reformed madrassah scheme.

65. The representatives of Eastern Bengal were not satisfied with the decision arrived at by the Conference summoned by Mr. Earle. They considered that a more modernised madrassah curriculum was desirable and that English had not been given a sufficiently prominent place. The desirability of holding a separate conference for the Province of Eastern Bengal and Assam was urged, and the Provincial Muhammadan Educational Conference, which met in Mymensingh in 1908, suggested the constitution of a committee which might be convened for the purpose. The local Government approved the appointment of a committee which met in 1909. Shams-ul-Ulama Abu Nasr Wakeed, after consulting a number of Ulamas in various parts of India, prepared and submitted a syllabus for the consideration of the committee.

66. The Committee met in 1910 and recommended that the junior course of madrassahs should consist of seven classes as against six in Bengal. The chief features of this proposed course were :—

- (i) Largely to secularise the course ;
- (ii) Save in Dacca city, to teach the secular subjects through the medium of Bengali ;
- (iii) To omit Persian ;
- (iv) To make English compulsory in all except the two lowest classes.

The course was so framed that a pupil, after passing the final examination of the junior madrassah, might either enter Class VII. of a high school (*i.e.*, the lowest class in the high section of the school, Class X being the top class) or the lowest class of a senior madrassah. The teaching of the Quran was introduced and Arabic was to be taught on modern lines.

67. The senior course of the madrassah was to extend over four years; and the committee recommended that English be compulsory. Shams-ul-Ulama Kamaluddin Ahmed, the Superintendent of the Chittagong Madrassah, dissented from the opinion of the majority on two grounds: (*i*) the course proposed was already heavy, (*ii*) it was useless to try and proceed too fast; and English had already been made a compulsory part of the junior course.

The course of the senior department included mathematics, elementary physics, philosophy, logic, jurisprudence and law, the Arabic language and literature and the principles of Islam.

A title course which followed the same lines as those on which the course put forward by the Earle Conference was based was also proposed.

68. Mr. H. Sharp, who was then Director of Public Instruction in Eastern Bengal and Assam, in putting these proposals before Government pointed out certain difficulties in the immediate adoption of the scheme. The chief difficulties were the expense, the want of teachers, the breach with the Calcutta Madrassah and want of suitable text books. Mr. Sharp pointed out that the revised curriculum attempted too much and contained a heterogeneous mixture of subjects.

69. Mr. R. Nathan was the next to take up the case. The position which he assumed was that the revised curriculum should be as simple as possible, and should be introduced into as many madrassahs as financial considerations would permit. With this object in view a conference was held in Dacca in March 1912, when the proposals of the 1910 Conference¹ were taken as a basis of discussion, and such modifications in them were suggested as appeared likely to make the course simpler and more practicable.

70. These revised proposals were under the consideration of the Government of Eastern Bengal and Assam at the time of the

¹ Para. 66 above.

redistribution of territories ; and, before any further progress had been made, the Government of India had announced their intention of establishing a residential university at Dacca.¹

71. The Dacca University Committee decided to adopt the suggestion of the Government of India that a Department of Islamic Studies should be included in the new University of Dacca. They took as a starting point the proposals made by the Dacca Conference of March 1912. These proposals contemplated a junior department with seven classes and a senior department with five. On the advice of the sub-committee which was specially appointed to consider the matter, the Dacca University Committee reduced the number of classes to six and four respectively ; they approved generally the syllabus for the lower classes and worked out a detailed syllabus for the upper classes. The whole question was further examined in March 1913 at an informal conference over which Mr. Nathan presided, and some slight modifications were made in the text-books prescribed for the junior department. The courses comprise instruction in the Quran, Urdu, Bengali, arithmetic, geography, history, English, Arabic, drawing, and handwork and drill. In the senior classes attention is concentrated on Arabic, English and mathematics.²

72. The Government of Bengal in its resolution No. 450 T. G., dated 31st July 1915, approved of the scheme and described it as follows :—

“ The Governor in Council is satisfied that the syllabus of studies drawn up by experts in consultation with the leaders of the Muhammadan community is well calculated to serve the highest interest of that community. His Excellency in Council has accordingly decided to adopt this syllabus for all Government madrassahs except the Calcutta Madrassah... While not absolutely debarring from Government aid such institutions as adhere to the orthodox course, the Governor in Council will in future give preference to those that adopt the new course and entertain a staff on the scale prescribed.

From one point of view the reformed madrassah course may be regarded as preparatory to the Islamic studies of the Dacca University ; it is, however, complete in itself, and students who wish to pass from a madrassah to any university course other than that of Islamic studies will not find themselves hopelessly handicapped by reason of their lack of knowledge of general subjects.

¹ Para. 8 of the resolution of the Government of Bengal, No. 450 T. G., dated 31st, 1914 ; see also Chapter VI, para. 60.

² See the volume of appendices to this report.

The two outstanding features of this course are—

- (1) the omission of Persian ; and
- (2) the inclusion of English as a compulsory subject.

With regard to the first of these points, the Governor in Council fully realises that 50 years ago a Muhammadan in Bengal with no knowledge of Persian would not have been counted an educated gentleman ; but he is informed that even the most earnest advocate of Persian now recognises how utterly opposed to all sound educational principles it is to attempt to make a boy learn five languages, *viz.*, Bengali, Urdu, English, Arabic and Persian. A knowledge of Bengali is obviously indispensable ; without at least a good working knowledge of English a Muhammadan cannot hope to make his way in the world ; Urdu is, as it were, a link between the Muhammadans of Bengal and those of other parts of India ; Arabic is the language of Islam. Between Persian and Urdu there is a close affinity, and during the last 50 years a great development has taken place in Urdu literature. The Governor in Council believes that Urdu, if properly taught, will contribute as much to the culture of Muhammadans at the present day as Persian did some 50 years ago. Under the circumstances, His Excellency in Council has decided, not without regret, to omit Persian from the school course ; and he notices that even Mr. Earle's Conference, which was inclined to be conservative, made Persian optional with English."

The Governor in Council also assigned special funds out of which the madrassahs adopting the reformed course might be assisted ; the Government grant was not usually to exceed half the total working cost of the institution.

73. The Report on Public Instruction in Bengal for 1915-16 summarised the position as follows :—

" The reformed madrassah scheme is an attempt to bring a system of specially Islamic education more into line with the requirements of modern life. How far it will succeed, it is impossible as yet to say. In the Chittagong district it has resulted in a heavy fall in the numbers attending the more important madrassahs and the establishment of a number of private madrassahs teaching the old course. The feeling in Chittagong is that the reformed course, while it will not produce good *nullahs*, etc., will fail to turn out a Moslem capable of competing with others in secular life. Those who think that the reform was in the right direction hope that the scheme will eventually secure public confidence, but they consider that this will take time."

(D) *The retention of the orthodox¹ course at the Calcutta Madrassah.*

74. The Government of Bengal decided that one Government madrassah in the Presidency should continue to teach the orthodox course, either without English or with English as an optional subject. Opinions had been collected as to which madrassah

¹ See para. 89 and footnote.

should retain the old course, and they almost all pointed to the Calcutta Madrassah as the one in which the orthodox course should be maintained. It was therefore decided that the reformed course should not be adopted in the Calcutta Madrassah.

75. The Government of Bengal, before deciding that the orthodox madrassah course should continue to be taught in the Calcutta Madrassah, had addressed a letter¹ to the leading Musalmans of Bengal and to the secretaries of various *anjumans* in which the following question was put :—

“ In order, therefore, to meet the wishes of the strictly orthodox Muhammadans, Government is advised that it will be necessary to have at least one madrassah in the province for teaching the old orthodox course without English. The only question remaining to be decided is which of the existing madrassahs shall be selected for this purpose.”

76. It is interesting to note that out of the twenty-two correspondents who replied to this question, fourteen were in favour of the Calcutta Madrassah (four of these were in favour of organising a modernised course alongside of the orthodox course), three were in favour of the Chittagong Madrassah, two were in favour of the Hooghly Madrassah while two held that there should be an orthodox madrassah at more than one place. The Muslim Association of Dinajpore was not in favour of any madrassah retaining the orthodox course.

“ Under the present condition of our society,” it wrote, “ we would like that English should accompany the teaching of the orthodox course in Arabic to make our Maulvis better enlightened and thus useful members of our society than they have hitherto been. In this twentieth century Muhammadans should not lead their lives as antideluvians but as useful citizens fully alive to their present surroundings.”

77. At a conference held at Chittagong on the 13th August 1913, it was resolved that :—

“ The madrassahs must of necessity take up the reform scheme since an English education is now-a-days a necessity for the Muhammadan community which has to compete with the Hindus who have made English education a speciality. It was the general feeling of the Conference, however, that provision should be made for the few students who wished to follow the old orthodox course. It was agreed that the Calcutta Madrassah could most usefully be reserved for teaching on the old lines, though it was pointed out that even the Calcutta Madrassah did not turn out as good men as the up-country madrassahs, and it would be necessary to reorganise the Calcutta

¹ For the reformed madrassah curriculum, see the volume of appendices to this report. The Islamic Department curriculum will be found in the Dacca University Report.

Madrassah. Hardly a single man who left the Calcutta Madrassah could be called a man of real culture and wide learning who would command the respect of the Muhammadan-community. For this reason if the Calcutta Madrassah was to be reserved for the orthodox system it would have to be reorganised and placed on a sounder basis."

78. Shams-ul-Ulama Abu Nasr Waheed, who was consulted, said :—

" Turning to Western Bengal we find that the madrassah education itself is not so popular there. While in addition to the Government madrassahs there are in Eastern Bengal as many as six full-grown senior (private) madrassahs besides two or three in the course of formation, not to speak of the innumerable junior madrassahs and maktabs, I do not know whether Western Bengal can boast of a single private senior madrassah or any decent number of junior madrassahs or maktabs. Young men from Eastern Bengal form the bulk of the pupils of the Calcutta and Hooghly Madrassahs, who are sure not to flock therein, at least in such numbers, if once the reformed course is introduced in Eastern Bengal *exclusively*. Those persons of Western Bengal who are loud in their cry for the old orthodox course to be followed in the Calcutta Madrassah are generally those who would not allow any relative or friend of theirs, not to speak of their own children, to receive instruction in the Calcutta Madrassah (Arabic Department). Yet they are sentimentally attached to the Calcutta Madrassah (Arabic Department) as if they look upon it as a glorious piece of antiquity left by some ancestors to be jealously guarded against any improvement or as a monument of a glorious past when the Calcutta Madrassah was established for the purpose of turning out scholars fit to monopolise all the posts of honour and emolument during the early days of the British rule in India, when Persian was still the court language and justice was administered in accordance with the Muhammadan law."

79. A committee was appointed in 1915 to revise the curriculum of the Calcutta Madrassah. Nothing has resulted from the recommendations of this committee.

.. (E) *Madrassah examinations.*

80. Up to the year 1913, examinations at the end of the senior department course were held by the Central Board of Examiners, of which the Principal of the Calcutta Madrassah was secretary. In 1913, orders were issued to the effect that the Central Board of Examiners should conduct the lower and higher standard examination only. The examinations of the intervening classes were to be conducted by the boards of the madrassahs concerned.

81. The title examination was constituted in the year 1912 and the junior madrassah examination according to the reformed scheme was held for the first time in March 1917.

82. The final examination of the senior departments of the reformed madrassahs was to be conducted by the Dacca University. On account of the postponement of the Dacca University Scheme the Government of Bengal has recently issued orders that a special Islamic matriculation examination and a special Islamic intermediate examination will be held in 1919 and 1921 respectively.¹

83. In the year 1916-17 four Government and seven aided senior madrassahs sent up 254 candidates, of whom 191 passed. For the lower standard 11 madrassahs sent up 316 candidates, of whom 206 passed. For the title examination, the Calcutta Madrassah sent up six candidates of whom five were successful.

(F) Summary of evidence before the Commission.

84. The reform of the madrassahs has been a thorny question for over half a century ; and the reforms recently introduced, on the recommendations of the Earle Conference and the Reformed Madrassah Committee, do not appear to have given full satisfaction.

85. The Musalmans of Bengal say in the memorandum² which they presented to the Commission :—

“ The Muhammadans, having been so suddenly thrown out of Government patronage, were taken aback and could not give up the study of a language so vitally connected with their social and religious life ; and consequently the Arabic Department, Calcutta Madrassah, continued to be run on the old lines with the result that it lost much of its former utility. Scholars passing from it no longer enjoy the good fortune of being employed in Government service, not to speak of a few marriage registrarships, of Persian and Arabic teacherships in high English schools, for which also a knowledge of English has now become necessary. Under the circumstances they have been reduced to the necessity of either turning religious hawkers, living mainly on the charities of others, or becoming *imams* and *muazzins* attached to some mosques at starving wages.”

86. Maulvi Abdul Karim³ writes :—

“ A large number of orthodox Musalmans, who cared more for religious than for secular education, continued to send their children to the madrassahs instead of to the schools and colleges. As, however, their course of studies was not revised in view of modern ideas and present conditions, the madrassah students, as at present educated, are not qualified for any useful career in life, and many of them have to be a burden upon the community. In order

¹ See para. 107 below.

² General Memoranda, page 173.

³ *Ibid.*, page 171.

to remedy this unsatisfactory state of things, the course of oriental studies has lately been revised and proposals for further revision are under consideration. But, unless the madrassah students acquire a fair knowledge of English, they can neither properly earn their livelihood nor make themselves very useful to society.

The question of the English education of Arabic scholars, therefore, demands careful consideration. It is a matter in which the Musalmans are vitally interested. For the community cannot be influenced for good or for evil to such an extent by anybody else as it can be by the ulamas. It is through them that the great majority of the people can be reached. It is, therefore, essentially necessary in the interests of the community as well as of the Government that the madrassah students should be given such an education as will make them intelligent and enlightened citizens."

87. During our tours in Eastern Bengal we received no complaints about the reformed madrassahs, but Khan Bahadur Maulvi Aminul Islam¹ in his note on madrassahs writes :—

"It is an accepted principle that Muhammadan secular and religious education must go hand in hand; one is inseparable from the other. It was with this object in view that Government was pleased to introduce the reformed madrassah scheme which is a compromise between the present madrassah and school education, the object being to meet the special requirements of those members of the Muhammadan community who are not satisfied with the purely secular education now imparted in schools nor with the purely religious education given in madrassahs. Experience has shown that this experiment has not met with success. The education given in a reformed madrassah does not fit them for the ordinary vocations of life nor give them sufficient knowledge of Islamic laws to make them useful as religious guides. A system of education must be evolved which should ensure that the rising generation receive in youth a sound and healthy training and be improved morally and intellectually, so that they may become useful members of society."

88. Complaints were also made to us on the unsuitability of the courses. The Musalmans of Calcutta complained that the two years' special course in English provided in the Earle scheme has never been made available in the Calcutta Madrassah.

89. Mr. A. H. Harley² writes :—

"In Egypt, during Lord Kitchener's recent administration, a revised course on these lines was introduced into the stronghold of orthodoxy, Al-Azhar. The trend, therefore, favours the retention of the old and the addition of the modern, and it is not out of place to mention that certain orientalists have advocated the erection of the new on the old and not the replacement of the latter as has practically occurred.

It would not however be fair to regard madrassahs as theological departments only and to award alumni a special degree and leave them with no

¹ General Memoranda, page 167.

² Ibid., page 104.

better prospects than they now enjoy. Students of madrassahs would in an Islamic country be qualified for Government posts.

The course of studies in these orthodox seminaries is traditional, i.e., the 'sciences' necessary for the interpretation of the Koran are the main subjects of study, the remainder being those 'sciences' which the Arabs learnt from foreign peoples. In the Koranic 'sciences' are included the traditional or religious 'sciences' and the linguistic 'sciences'; the latter comprise the intellectual or philosophical 'sciences' (also called 'the sciences of the foreigners').

I.—Native Sciences.

1. Koranic Exegesis (Ilmul-Tafsir).
2. Koranic Textual Criticism (Ilmul-Quiráát).
3. Science of Apostolic Tradition (Ilmul-Hadis).
4. Jurisprudence (Fiqh).
5. Scholastic Theology (Ilmul-Kalam).
6. Grammar (Nahw).
7. Lexicography (Lughá).
8. Rhetoric (Bayan).
9. Literature (Adab).

II.—Foreign Sciences.

1. Philosophy (Falsafah).
2. Geometry (Hindesah).
3. Astronomy (Ilmul-Nujum).
4. Music (Mausiqi).
5. Medicine (Tibb).
6. Magic and alchemy (Al Sihr-wal-Kimiya).

The foreign sciences are almost entirely omitted from the present Bengal madrassah course, only philosophy (including logic) and geometry being retained. and it is unlikely that of the remaining four any except medicine will be restored to the curriculum."¹

¹ While Mr. Harley's statement is a correct account of the basis of the curriculum of the orthodox madrassah, it must be remembered that the *Dars-e-Nizamia* or *Nizamia* syllabus which is still taught in the Calcutta Madrassah was introduced by Mulla Nizamuddin Sihalvi, a resident of Sihali near Lucknow, and that it is called after his name. This Maulvi lived during the reign of Alamgir I and was the founder of the famous Arabic school of Lucknow known as 'Firanghi Mahal'. Many of the books which are used in connexion with the Nizamia syllabus were written by the pupils of Mulla Nizamuddin Sihalvi. The commentary on logic was written by Maulvi Hamdullah of Sandila, a pupil of Maulvi Nizamuddin, and the book on Muhammadan law was written by Hafiz Mohibullah of Bihar, a pupil of Maulvi Nizamuddin's father.

The Nizamia syllabus was modified in Delhi by Shah Waliullah (known as *Mahabatullah*) who introduced into it the teaching of Hadis (the traditions of the Prophet). This modification was accepted by the schools of Lucknow and Deoband. The syllabus was introduced in Bengal by Mulla Behrul-Olum, son of Mulla Nizamuddin. There were a number of appendices to this report.

90. Great stress has been laid by some of our witnesses on the study of English. English is a compulsory subject in the reformed madrassahs and the Dacca Committee recommended that every student of the Islamic studies department should be taught and examined in English as a compulsory subject. Though English is becoming more popular in the Arabic department of the Calcutta Madrassah, there seems still to be strong opinion that it should not be made a compulsory subject, at any rate in the senior department of that institution. Mr. Harley¹ writes :—

" From the middle of last century efforts were frequently made to bring the Calcutta Madrassah and with it the affiliated madrassahs throughout Bengal into line with Government and private arts colleges, but the most that was conceded was the introduction of English as an optional subject into the Arabic department.....At present about one-third of the 550 students in the Arabic department take English in preference to the alternative language Persian."

91. Shams-ul-Ulama Vilayat Hussain² writes :—

" I suggest that the courses of studies in the Arabic department should be made more up to date and that the Muhammadan students should be taught English to such an extent as would enable them to conduct work in that language. Provision should accordingly be made in the Calcutta University so that they may be examined there in the courses of study and after passing their examination they may be given some diploma and title, and the various branches of Government services should be opened to them."

92. One of the deputations of Calcutta Musalmans submitted a memorandum on madrassahs of which the following is an extract :—

" On account of the past history of the (Calcutta) Madrassah, the Muhammadans of Bengal are very touchy about it and we therefore beg that in the changes that we have suggested two fundamental principles should be observed :—

- (a) The teaching of English should not be compulsory for every student. It should be optional. The University, if it thinks proper, may differentiate such students by awarding degrees of different names.
- (b) The Dars-e-Nizamia should continue to be taught in the Calcutta Madrassah. The recognition of such courses by the University is not without parallel."

¹ General Memoranda, page 164.

² Ibid, page 166.

93. The general opinion in Western Bengal appears in fact to be in favour of encouraging the study of English in the Calcutta Madrassah without making it obligatory on every pupil.

94. There is undoubtedly a general demand for oriental studies, preferably associated with the study of English. Maulvi Abdul Karim draws attention to this demand in a passage already quoted.¹ In the memorandum placed before us by the Musalmans of Bengal this demand is explained as follows :—

“ We, the Muhammadans in Bengal, are too closely bound up with our religion, and there is still a strong demand for studies on the old and traditional lines with or without a good working knowledge of English which may be a passport to Government service. Therefore it is very desirable that facilities should be afforded to the students of madrassahs teaching the orthodox course, when they evince an eager desire to learn the language of their rulers as a means to worldly emoluments because thereby Government would be able to foster around it a band of loyal servants and faithful subjects who by their religious training would surely be much more devoted to Government than the votaries of a materialistic secular education.”²

95. Mr. Harley, in the note already referred to, says that the trend of opinion favours “ the retention of the old and the addition of the modern.” He adds that certain orientalists advocate the erection of the new on the old rather than the substitution of the new for the old and suggests that the reformed madrassah scheme involves a somewhat too abrupt severance with the past.

96. Mr. J. R. Cunningham, the Director of Public Instruction in Assam, when advising his Government in 1913 on the Dacca University Department of Islamic Studies and the reformed madrassah scheme, wrote as below. Mr. Cunningham has submitted to us as evidence the letter which he then wrote to the Government of Assam with the intimation that he has not, in the interval, found it necessary to modify his views :—

“ On behalf of Assam I would enter a caveat against the establishment of a department of Islamic studies as part of the new University.

The special Islamic courses are intended to carry to their completion the studies of the madrassah—to follow upon a course of instruction differing both in aim and content from the courses regarded as suitable for the generality of the people. The ordinary courses are those of the high school—a secular institution which seeks to qualify pupils of all denominations for ordinary citizenship. The courses of the madrassah on the other hand are sectarian and lead to the direct social and religious service of Islam.

¹ Para. 86 above.

² General Memoranda, page 174.

For long the conservatism of Muhammadans has led them to establish and support madrassahs in preference to secular schools. With the advance of education the madrassahs have naturally transcended their narrower functions and attracted a more general public. The knowledge of Islamic languages and of the subjects taught in the madrassah has been held in such high esteem that an attendance in the first few classes has been regarded as satisfying the requirements of an ordinary education. The Muhammadan community has so been diverted from the general course of advance and has lagged behind whilst other communities pressed forward. Even for those of the students who have entered the madrassahs with a view to complete the courses, the instruction has been unsuitable, clinging to an orthodoxy long out of date and fastened in inefficiency by the exulsion of liberal influences.

In these circumstances, attempts have been in force for some time to reform the madrassahs, to bend their courses to join with those of the high schools, to bring influences of compulsion to bear upon the more conservative portion of the community by insisting upon the study of English and the importation into the curriculum of modern courses of instruction in such subjects as arithmetic and geography. As a result, courses have been proposed which are heavily overweighed in the attempt to make a single system answer the demands of divergent purposes.

I turn now to consider the suggested courses of instruction.

As the Koran is to be taught in the first two classes it may be assumed that the course is self-contained—that it begins from the beginning, requiring no previous instruction in a school. The period of the junior course covers the first six years of school life, and in that time a pupil has to learn three languages in addition to his own vernacular. With this may be compared the curriculum of a lower primary school, which covers a five, nominally a four, years' course during which it is found difficult to instill into the pupils an elementary knowledge of a single vernacular. The junior course is further to be cumbered by an additional year's instruction in general subjects for those who wish to pass on to a high school. The junior madrassah will therefore handicap its pupils by imposing upon them a heavier task of learning and giving their competitors a year's start ahead of them.

At the end of the junior course pupils will have the option of going on to a high school or of remaining in the madrassah for four years with a view to qualifying for matriculation in the Department of Islamic Studies. It is of the essence of the scheme that those who complete the full madrassah course should be as well qualified in English as the ordinary pupil who passes his matriculation from a high school. But in the scheme proposed the full days' instruction in and through the medium of English which obtains in the upper classes of a high school is replaced by less than a half-day in the madrassah scheme. Nor I think can the allowance for English as a compulsory subject be wisely increased; the first aim of the madrassah must after all remain the training of maulvis and religious men and the first requisite the knowledge not of English but of the Islamic law and culture.

It has been urged that an attempt of this kind is necessary in order to attract to education the more orthodox portion of the community. This may be doubted and it may be apprehended that, while conciliation on the lines proposed would probably be immediately popular, its effect in the long

run would be to retard the course of Muhammadan progress. I suggest that it would be better to face the situation, to restrict the madrassahs in number, confining them as far as possible to the education of those to whom an intimate knowledge of the Islamic languages and religious culture is essential, and converting the remainder by a gradual process into ordinary schools—schools primarily for Muhammadans, staffed by Muhammadans under Muhammadan management, offering special facilities to Muhammadan pupils by reason of subscriptions from the community and differing only from the ordinary high school affording some preparation in the earlier stages for the study of an Islamic language or languages in the last four years of the school course. The improvement of madrassahs might then be undertaken without embarrassment. Such a policy would, I believe, tend to bring Muhammadans more rapidly into the general current of advance and would, at the same time, permit of due concentration on the improvement of madrassah instruction proper. The scheme now under consideration would have the effect of diverting the Muhammadan youth from the same path as the Hindu, of imposing upon him a heavier burden, of taking the education of a large number away from the benefit of the general funds devoted to the interests of secular education, and of modifying the thoroughness of the Islamic course as a professional training by the importation of elements irrelevant to its purposes.”¹

97. Various suggestions have been made to us for the improvement of madrassahs. Some of our Muslim correspondents, with the Punjab University in their minds, advocate the institution of an oriental faculty of the Calcutta University. They say:—

“ We cannot but feel that the time has now come for the University of Calcutta to take these students under its protecting fold, as its sister university in the Punjab has already done to its students of oriental literature and learning. The said University has established oriental examinations in Persian, Arabic or Sanskrit, namely Munshi Alim and Munshi Fazil in Persian, Maulvi Alim and Maulvi Fazil in Arabic and Visharad and Shastri in Sanskrit; and permits the students who have passed the highest examination either in Persian or Arabic or Sanskrit, to present themselves for examination in the English papers of the matriculation, intermediate and B.A. examinations of its Arts Faculty successively; so that any of such oriental students obtaining pass marks only in English at the bachelor of arts examination is deemed to have passed the said examination and is admitted to the degree of bachelor of arts in that University. The syllabus of studies at present current in the Calcutta Madrassah up to the stage of the senior fifth year class is practically the same as that of the Maulvi Fazil of the Punjab University, while the curriculum for its title course is much superior to that; and it would not be out of place to ask for such privileges for the Arabic students in Bengal.”²

98. Maulvi Abdul Karim³ suggests that the University of Calcutta should establish faculties or oriental studies similar to

¹ Question 4.

² General Memoranda, page 173.

³ Ibid., page 172.

those of the Punjab University. He thinks that the Arabic Department of the Calcutta Madrassah, the course of studies in which is in no way inferior to that of the Oriental Faculty in Persian and Arabic of the Punjab University, should be recognised by the University, its examination being held either by the University or as at present by a Madrassah Board. The Maulvi also suggests that Calcutta Madrassah students after they have passed the junior and senior madrassah examinations, might be examined by the University in English only and that, if they satisfy the examiners in that subject, they should be declared to have passed the university examination.

The Head Maulvi of the Calcutta Madrassah endorses this suggestion.¹

99. The deputation of Calcutta Musalmans favour the recognition of the Calcutta Madrassah by the University, but in a somewhat different way :—

" The student who has passed the final examination of the Madrassah corresponding to the B.A. examination, should be permitted under conditions, which we need not discuss here in detail, to study for a special master's degree examination provided that he has acquired such a workable knowledge of English that he may be able to read modern English books on Arabic literature. Such a student should also be expected to carry on research work on modern lines. The students who have taken this special master's degree will be better qualified to act as professors in colleges than the students who have taken the M.A. degree in Arabic from an arts college under present conditions."

100. The above correspondents think that the introduction of an Islamic Faculty would be advantageous both to the University and to the Madrassah.

" We beg to draw your attention to the desirability of instituting a special board for Islamic learning in the Calcutta University which may conduct the madrassah examinations and award the degrees. We are led to this conclusion by the following reasons :—

(1) The teaching now provided for the study of the M.A. degree in Arabic and Persian is so poor that students after taking their degrees are not really competent to act as professors in colleges. The persons who receive their education in the old orthodox style and who have a thorough knowledge of Arabic or Persian, or of both, are not eligible to become professors on account of their ignorance of English. The result is that the colleges have to appoint persons whose knowledge of Arabic and Persian is in-

¹ General Memoranda, page 176.

sufficient and thus the standard of Arabic and Persian gets lower every day.

- (2) The recognition of the madrassah studies by the University will encourage the teaching of Arabic and the madrassah students will find employment as teachers in the schools and the colleges and in other departments.
- (3) The want of provision of Persian and Arabic courses is one of the complaints of the Muhammadan students in Calcutta. The Madrassah will always have a strong staff of Persian and Arabic teachers and they can always deliver lectures to the students for whom the colleges make no provision for the study of Persian and Arabic."

101. There is in fact a practical unanimity of opinion that the highest studies of the Arabic Department of the Calcutta Madrassah should be brought within the sphere of the Calcutta University's influence. But the way in which this should be done is not very clearly stated.

(G) The present position of madrassahs.

102. The course taught in madrassahs whether orthodox or reformed, is divided into four stages :—

- (a) the primary classes ; (this section of a madrassah is generally called a maktab. The course when it includes a certain amount of secular instruction is classified as part of the primary school system. Maktabs are frequently found as distinct institutions existing apart from madrassahs.)
- (b) the junior department corresponding roughly to the middle section of the ordinary school curriculum ;
- (c) the senior department corresponding to the high school section of the ordinary school curriculum ;
- (d) the title classes corresponding to university degree courses.

103. A junior madrassah is one which has no class above the junior department ; a senior madrassah is one which has a senior department. A few madrassahs have title classes above the senior department, but the Calcutta Madrassah is the only institution which provides full teaching for the title classes.

104. In Bengal there are thirteen senior madrassahs of which four are maintained by Government. Seven are aided and the rest are unaided institutions. All the senior madrassahs have junior departments attached to them. There are 247 junior madrassahs,

of which one is maintained by Government, 179 are aided, while the rest are unaided institutions.

105. There are 21,222 pupils in senior and junior madrassahs of Bengal. The total number of Musalmans in high and middle schools is 103,038. Thus 17·1 per cent. of those Musalmans who are attempting secondary education are being educated in madrassahs. Those maktab classes which correspond to the infants sections of primary schools are not included in these figures. The number of Musalmans who receive their primary education in maktab is very large.

106. The cost of maintaining 260 senior and junior madrassahs is Rs. 3,83,631, of which Rs. 1,05,646 are covered by fees. The average cost per head in the Government madrassahs is Rs. 74 per annum, of which Rs. 5 are met by fees. The corresponding figures in the Government high schools of Bengal are Rs. 44·9 and Rs. 24·7. The cost of education in the madrassahs is therefore more by Rs. 29·1 than the cost of education in high schools.

107. The final examinations of junior and senior madrassahs are conducted by a board which works under the Department of Public Instruction. The final examination of the reformed madrassahs has not yet been held. Its first examination was to be held in 1919 by the proposed Dacca University and the students after passing the examination were to be available for the Islamic Department of that University. The local Government has recently issued orders that the final examination should be conducted by the Department and that the classes of the Islamic Department which correspond to the intermediate classes of the university course should be opened in the Dacca Madrassah. The Dacca Madrassah will thus correspond to an intermediate college described in Chapter XXXII with four high school classes attached to it.

108. The curriculum¹ of the reformed madrassah includes Arabic language and literature, Muslim law and rhetoric, logic in Arabic, mathematics (arithmetic and geometry); English, history and a vernacular up to the matriculation standard are also taught. The history of India is taught in English and the subject covers the

¹ The curriculum of the junior and senior classes is set out in detail in the volume of appendices to this report.

Hindu, Muslim and British periods. In the two highest classes of the senior madrassah, the curriculum is arranged as follows:—

	Periods a week
Arabic language	4
Arabic literature, prose	3
Arabic literature, poetry	3
Rhetoric and Muslim law	3
Logic taught in Arabic	2
Arithmetic and geometry taught in English	2
English (the same course as that prescribed for the matriculation stage)	8
Indian history	1
Vernacular (Urdu or Bengali)	2

109. The course differs from the matriculation course by the omission of algebra and the inclusion of logic, rhetoric and Muslim law, which are all taught in Arabic from modern books. The standard of Arabic language and literature is much higher than the standard of compulsory or additional Arabic required for the matriculation examination.

110. The regulations for the special Islamic matriculation examination distribute the marks as follows:—

English, I paper	100
English, II paper	100
Arithmetic and geometry	100
Indian history	70
Vernacular	30
Arabic language	100
Arabic literature	100
Rhetoric	70
Muslim law	70
Logic	60
 TOTAL	 800

Thirty per cent. in each subject and thirty-three per cent. in the aggregate are required to pass the examination in the third division.

111. We think it desirable that the examinations of the reformed madrassahs should be conducted under the control of the authority which will be responsible for the secondary school and intermediate examinations. We have recommended in Chapter XXXI that the reformed madrassah examinations should be conducted under the final authority of the Secondary and Intermediate Board.

112. The Calcutta Madrassah differs from the other madrassahs in the following three aspects :—

- (a) English in the Calcutta Madrassah is not obligatory ; it is alternative to Persian.
- (b) The Nizamia course is taught and Government has undertaken that this arrangement shall not be interfered with.
- (c) The standard is higher and teaching of a general university grade is provided.

113. The reformed madrassahs come within the cognisance of the Dacca University and it is the desire of the Muslim community of Calcutta that the Calcutta Madrassah should be brought into some connexion with the Calcutta University. We discuss this question in Chapter XLII.

(P) Islamic studies in the University.

114. We must in conclusion describe the arrangements made by the University for the promotion of Islamic studies. The Muslim undergraduates in Calcutta have found it difficult to obtain adequate instruction in Persian and Arabic ; their number is limited and they are to be found distributed amongst almost all the colleges. Muslim students often have to enter colleges not affiliated in Persian or Arabic and may thus have no opportunity of studying these subjects. The university authorities realised some years ago that this placed Muslim students at a disadvantage and that steps should be taken to enable them to keep in touch with the elements of Islamic culture. With this object in view, the University has maintained teachers of Persian and Arabic for the benefit of undergraduate students who are attached to colleges not affiliated in Persian or Arabic.¹ Besides this, the University has organised classes in Arabic and Persian for post-graduate students. The staff consists at present of six lecturers, of whom two are common to both branches, one is specially assigned to Arabic and three to Persian. The number of Muslim students who undertake the study of such courses is extremely limited and there have been sessions when there has been no student in one or other of these languages. This fact

¹ A fee of Rs. 3, now reduced to Re. 1-8, is charged for admission to these classes.

cannot be explained merely by the general backwardness of the Muslim community in the matter of higher education. The extremely limited number of students in Arabic and Persian may be attributed with better reason to the lack of facilities for adequate training in these subjects at the undergraduate stage. But whatever the cause may be, the University ought not to discontinue these classes, for in addition to the needs of the community we have to take into consideration the claims of Islamic scholarship. In this connexion, we may remark that the courses prescribed for the M.A. degree examination in Arabic and Persian are neither so varied nor so comprehensive as those recommended in Sanskrit and Pali. On this subject, a reference may be made to the memorandum of Dr. Abdulla-al-Mamun Suhrawardy.¹ In fact the subjects included in any adequate scheme for the study and investigation of Islamic culture are so numerous and so diversified that the entire scheme for Persian and Arabic studies for the M.A. degree examination should be recast. In addition to Arabic and Persian, the University has made provision for the study of Islamic history which forms an alternative subject for the M.A. examination in history. The Board of Higher Studies in History has arranged the post-graduate lectures in Islamic history in two broad divisions, namely, Islamic culture outside India and Islamic culture within India. Here again we find that the Muslim students are limited in number, and it is plain that the demand at present for facilities of this description is of a very restricted character. We hope that the facilities, such as they exist, will be utilised in an ever increasing degree, and that they will be still further developed.

115. Before we conclude this chapter of our report, we must reiterate what we stated in Chapter VI, namely, that in our opinion there can be no solution of the problem involved in the educational backwardness of the Muslim community of Bengal which does not include a persistent attempt not only to make madrassahs places of real intellectual culture and training but also to bring them into touch with the needs of modern life.

¹ General Memoranda, pages 381-382.

CHAPTER XVII.

THE EXAMINATION SYSTEM.

I.—Introductory.

1. The problems of examination, difficult and important in all countries, are nowhere more difficult or important than in India and especially in Bengal.

2. In no branch of education does the machinery tend so much to become regarded as an end in itself or its smooth and regular running (where it exists) as a tribute *per se* to the excellence of its organisation ; yet in no branch does badness of design, even in small and apparently trifling details of the machinery, affect so profoundly the whole psychology of education from the school upwards to the university ; and in none is this fact less generally recognised. The appreciation of the facts shown by many of our correspondents is indeed both wider and more acute than experience in other countries might have led us to expect ; and this is evidence of the extreme tension, moral and intellectual, produced in Bengal by the examination system of to-day.

3. We shall first of all draw attention to those more obvious and striking features of the examination system in Bengal and India generally to which our attention has been drawn by official pronouncements, or by our witnesses, or by our experience ; and especially to the effects of the examination system on every school and every class room throughout Bengal, on methods of teaching and on methods of learning, and on the relations between teachers and taught. We shall next enquire into the meaning and objects of degrees and examinations generally, and shall give concrete illustrations of the views which we hold on these points. In the light of these views we shall analyse the evidence which has been submitted to us in regard to details—many of them details of great practical significance—both of the examination-system, and of the teaching system correlated to it at every point ; and we shall discuss suggestions for reform that have been made to us. We shall incidentally make certain proposals in regard to changes that appear to us

practical and desirable, but our systematic proposals will be summarised in Chapter XL of this report.

4. The influence of examinations on the school system, and the matriculation examination itself have been separately dealt with in detail in Chapter IX.¹

II.—Magnitude of the examination problem.

5. "Examinations as now understood," says the Government of India resolution on educational policy of 1904, "are believed to have been unknown as an instrument of general education in ancient India, nor do they figure prominently in the despatch of 1854. In recent years they have grown to extravagant dimensions and their influence has been allowed to dominate the whole system of education in India, with the result that instruction is confined within the rigid framework of prescribed courses, that all forms of training which do not admit of being tested by written examinations are liable to be neglected, and that teachers and pupils are tempted to concentrate their energies not so much upon genuine study as upon the questions likely to be set by the examiners."

6. In 1906 the new regulations for the University of Calcutta under the Act of 1904 came into force. But the changes introduced under those regulations, though some of them were of importance, were not of a character to affect the general situation described in the resolution quoted above; and since 1904 the main changes have been in the size of the examinations, rather than in their character so far as Bengal is concerned.

The total number of candidates for matriculation for India as a whole in 1904 was 23,800 in round numbers; in 1916, 27,200. But it is to be remembered that these last figures do not include the number of candidates for the school-leaving examinations which since 1904 have been introduced in Madras, Bombay, the United Provinces and the Punjab. In 1904, there were 8,800 candidates for the Madras matriculation; in 1916, only 52. In Calcutta, the number of candidates for matriculation in 1904 was over 7,100; in 1916, over 14,000; in 1917, over 16,000, in 1918, 14,675,² in 1919, 15,921.

¹ See also Chapter XIII, paras. 42, 43 and *passim*.

² The reduction in numbers in 1918 was doubtless mainly due to the establishment of the University of Patna.

7. The growth of the examination system is perhaps better illustrated by comparing the total number of candidates for intermediate and bachelors' examinations in the Faculties of Arts and Science for different years. For all the Indian universities, the total number of such candidates was in 1904 just under 11,000 ; in 1916, it was just under 25,000.¹ The corresponding figures for the University of Calcutta were in round figures 6,000 and 11,200. The total number of all candidates examined by the University of Calcutta in 1904 was just under 15,000, in 1918 it was nearly 32,000.²

8. The dimensions that were regarded by the Government of India as extravagant in 1904 have been doubled for Calcutta. Calcutta is probably the largest examining university in the world and the creation of the universities at Patna and Benares and of a university at Dacca will not deprive it of that eminence. Nor do we see any possibility or desirability of the total number of examination candidates in India being diminished. What might be diminished (and this we imagine is what the Government of India resolution aimed at diminishing) is the number of candidates dealt with by wholesale methods which ride roughshod over teaching organisations.

III.—Domination of the teaching system by the examination system and its results.

9. The University Commissioners of 1902 expressed the view that it was "beyond doubt that the greatest evil from which the system of university education in India suffers is that teaching is subordinated to examination, and not examination to teaching."³ The Government of India resolution of 1904 speaks of the domination of the whole system of education by examination. In reply to Question 1 of our questionnaire,⁴ although it does not refer to

¹ Owing to the system by which Madras candidates take their degree in parts, and during a transitional period took them under two different sets of regulations, it is not possible to give exact figures for this University. In the figure given above, the number of candidates for the B.A. at Madras is estimated as 1,200. —

² The totals are derived from the table in the Report of the Calcutta Syndicate for 1918.

³ Report of the Indian Universities Commission, 1902, page 43.

⁴ "Do you consider that the existing system of university education affords to young Indians of ability full opportunity of obtaining the highest training ? If not, in what main respects do you consider the existing system deficient from this point of view ?"

examinations explicitly, more than 80 witnesses have pointed to the examination system as one of the gravest defects in the Bengal system of education;¹ and many have indicated that its domination of the teaching is the worst feature in the system.

10. "The work of a college in Bengal," says Mr. J. R. Barrow Officiating Principal of the Presidency College, "is almost entirely conditioned by the examinations which have to be passed." The professors of chemistry in the same college (Mr. Jyotibhushan Bhaduri, Dr. B. B. Dey and Mr. Bidhu Bhusan Dutta) complain that teachers have little or no freedom of teaching owing to the rigid examination system. Nawab Syed Nawabaly Chaudhury regards the examination system as "a great deterrent factor in the way of true learning." "In this country," says Mr. A. C. Datta, the Principal of Murarichand College, Sylhet, "teaching is entirely subordinate to examination. A student's relation with the University is only understood by Indians to be simply by means of the examination and for the purposes of the examination." Shams-ul-Ulama Abu Nasr Waheed of Dacca speaks of the 'dominance of examination.' Mr. K. Zachariah, of the Presidency College, also speaks of the dominance of examination, and the 'scramble for degrees.' "To my mind," says Mr. Jatindra Chandra Guha, Professor at Rajshahi, "it is the examination system of the Univer-

¹ See, for instance, answers to Question 1 by: Mr. Altaf Ali, Mr. Jogendranath Bhattacharya, Rai Dinanath Biswas Bahadur, Mr. Charu Chandra Biswas, Mr. G. C. Bose, Principal of the Bangabasi College, Mr. Chintaharan Chakravarti, Principal of the David Hare Training College, Rai Lalitmohan Chatterjee Bahadur, Principal of the Jagannath College, Dacca, Mr. Ramananda Chatterjee, Mr. Brojendra Kishore Roy Chaudhury, Mr. Surendranath Das Gupta, Mr. A. C. Datta, Principal of Murarichand College, Sylhet; Mr. Promode Chandra Dutta, Mr. Surendra Mohan Ganguli, Mr. Patrick Geddes, Dr. Jagneswar Ghosh, Principal of the Ananda Mohan College, Mymensingh, Mr. R. N. Gilchrist, Principal of Krishnagar College, Mr. Haridas Goswamy, Mr. Jatindra Chandra Guha, Mr. Bipin Behari Gupta, Mr. Jogendra Nath Hazra, Principal of Midnapore College, Khan Bahadur Mohammad Iqmail, Maulvi Abdul Karim, Mr. D. K. Karve, Mr. Karunamay Khastgir, Mr. Purnachandra Kundu, Offg. Principal of Chittagong College, Mr. Gopal Chandra Lahiri, Mr. G. H. Langley, Mr. Akshay Kumar Maitra, Dr. D. N. Mallik, Mr. Panchanan Majumdar, the Rev. Father A. Neut, Rai Radha Charan Pal Bahadur, People's Association, Khuina, Rai Sri Nath Roy Bahadur, Mr. S. K. Rudra, Principal of St. Stephen's College, Delhi, Mr. Atul Chandra Sen, Rai Satis Chandra Sen Bahadur, Dr. Nares Chandra Sen Gupta, Mr. Surendra Mohan Sen Gupta, Staff of Serampore College, Dr. Prabhu Dutt Shastri, Mr. Anukul Chandra Sircar, Mr. F. C. Turner, Offg. Principal of Dacca College, Mr. Rajendranath Vidyabhushan, Mahamahopadhyaya Dr. Satis Chandra Vidyabhushana, Shams-ul-Ulama Abu Nasr Waheed, Mr. K. Zachariah. Some of this evidence is discussed in Chapter XIII, paras. 42, 43 and 51.

sity that is mainly responsible for the defective and abortive education imparted under its auspices." Speaking of schools, the staff of the Serampore College tell us that "the examination at the end of the course is the only thing that counts. Training is at a discount, and success in the examination is the be-all and end-all of the system;" and they add that the system in vogue is perpetuated to a very large extent in the colleges, and that they regard "the present university system, and the present system of Government administration which make practically everything dependent on success in examinations," as largely responsible for the evils of the present situation.

11. It would be wrong to think that Bengal is exceptional in this respect. Mr. S. K. Rudra, Principal of St. Stephen's College, Delhi, writes—

"examinations loom large and cover almost the whole field of vision (in universities). The whole system of education is thus greatly vitiated."

Dr. Tej Bahadur Sapru, of Allahabad, writes—

"the bane of university education in India is, and has been, that both the professors and the students have made a fetish of examinations."

Mr. J. G. Covernton, Director of Public Instruction in Bombay, says the methods of training "look too much to examinations and much of the work done is merely of a mechanical kind for particular examinations," and that this applies not only to a large majority of students but also to many teachers.

12. It may be thought that these statements are of a somewhat general and vague character; but they are supplemented by a mass of information supplied in answer to Question 9. The first portion of that question enquires specifically whether teaching is unduly subordinated to examination. Of the 213 witnesses who have dealt with this portion of the question, 169 have replied in the affirmative, 14 may be classed as doubtful and 30 only have replied in the negative.

13. We may deal first with the negative replies. The correspondents who reply in the negative include Mr. J. R. Banerjea, Vice-Principal of the Vidyasagar College (though he says some of his colleagues disagree), and Mr. Khudi Ram Bose, Principal of the Central College;¹ the latter regards subordination of teaching to suitable tests or examinations, such as exists in the Calcutta

¹ Question 9.

University as "a disciplinary provision of high educational value." Mr. A. H. Harley, Principal of the Calcutta Madrassah¹ (writing in consultation with Khan Bahadur Aminul Islam) appears to share that view. He writes—

"I do not consider that teaching is unduly subordinated to examinations. In Bengal the student-intellect is discursive and I consider that it requires the discipline of the examination system whereby it may be confined to intensive application for a period to essentials which are the condition of further progress."

It is clear that wise examining may convey suggestions of value to a large number both of teachers and of taught ; that it may draw attention to essential portions of a subject which are in danger of being neglected ; and that examiners in their reports may be able, where teachers are not competent, to draw attention to mistakes in their teaching revealed by concordant but erroneous answers of the candidates. But the question put was not whether examinations may not exert beneficial as well as injurious effects on teaching, a point which few would contest, but whether there is validity in the criticism that teaching is at present unduly subordinated to examination ; and to this we regard the reply as overwhelmingly in the affirmative, not only from the number of witnesses who take this view, but from the variety of their experience, the positions they occupy and the conclusive nature of their testimony.

14. Mr. J. M. Bose, of the Presidency College,¹ tells us that the average student of Calcutta University makes no attempt whatever to take an intelligent interest in his subject, except in so far as it is necessary for the passing of the examination, and that it is his invariable experience and that of most of his colleagues that if he attempts to illustrate the lectures by bringing in any subject such as aeroplane stability or wireless telegraphy the teacher is immediately asked if that subject is included in the syllabus of the University. The students, says Mr. Purnachandra Kundu, Offg. Principal of Chittagong College—

"prefer that lecturer who gives systematic 'notes' and points out 'important' questions. To avoid the risk of unpopularity, and hence inefficiency, even an able lecturer allows his lectures to degenerate into coaching work. To meet the demands of the vast majority of students, he has to sacrifice the intellectual development of the earnest and sincere students of superior abilities, who otherwise might have had the best possible training."²

¹ Question 9.

² Question 1.

"Teaching," says Mr. Südmersen, Principal of Gauhati College,¹ "is entirely subordinated to examinations. The student resents anything outside," and he adds that a definite attempt to secure wide reading of a subject by a particular member of his staff led to "almost empty benches in the following year." The whole atmosphere, says Mr. Surendranath Das Gupta of the Chittagong College,² is so much charged with the ideal of doing well in examination that it becomes impossible for any professor to hold out a higher ideal with fair success. The students, says the Rev. Father F. Crohan, Principal of St. Xavier's College,¹ "are not willing to give their attention at lectures to any remarks or explanations except such as bear on the questions likely to be put at the examination. It is a waste of time and energy to attempt to insist on anything else;" and the Senatus of the Scottish Churches College¹ tell the same story:—"In common estimation (they say) the only specific value of any teaching is that it prepares directly for some examination." "Examination dominates the teaching," says Rai Kumudini Kanta Banerjee Bahadur, Principal of Rajshahi College—

"all teaching is done with a view to secure successful results in the university examinations. The teacher who can best coach and who can give notes most suitable for answering probable questions in the examination is considered to be the best teacher. These notes are crammed."¹

The evidence from the Serampore College contains a striking passage by a Bengali member of the staff.

"The student is in college not to learn things for their own sake, but to gather material for the purpose of getting through certain tests. The average Bengali student is frankly worldly-minded. He cannot be expected to care for teaching which does not clearly aim at securing a pass for him at the university examination. The college lecturer cannot help but adapt himself to the peculiar requirements of the situation. At least, his work is something in the nature of a compromise between lecturing and coaching, for if he should attempt to soar beyond well-known limits, his class will very soon clip his wings or openly refuse to follow him. Most colleges in Bengal cannot choose but humour their students for the sake of the fees they pay."¹

These remarks, say the staff as a whole, they think in the main justifiable—

"though it must not be forgotten that even under the present system many of the best students have a genuine love for their subject, many teachers refuse to subordinate their teaching to examination purposes."

¹ Question 9.

² Question 1.

15. We need not pile up written evidence on this point. It was manifest to us from our own visits to lecture-rooms that except in a few striking instances the teaching was directed exclusively and narrowly to the examination syllabus.

16. Some witnesses have told us that teachers are judged not only by the students but also by the college authorities on the basis of their examination successes. "Both in private and Government colleges", writes Mr. Surendranath Das Gupta, of Chittagong,¹ "the authorities think that teaching with a view to secure the largest number of passes is the only duty of the teacher and, as a result of that, all teaching becomes necessarily subordinated to that end." This may be so, but it is clear that the main pressure on the teachers is exerted by the students themselves, whether directly or through the college authorities; for we have been told by dozens of witnesses that the students, with the rarest of exceptions, think and care for nothing but examination success and that they believe that under the existing system of examination their success will be endangered if the lecturer 'wastes time' by teaching outside that syllabus.

17. Whether the examination system could be so modified as to avoid this danger is another matter. We think it could, but we are bound to say that in the opinion of some competent witnesses the fears of the students are at present not without a semblance of justification. "The whole undergraduate teaching," says Mr. D. B. Meek,² Professor of Physics at the Presidency College, "is bound down by examinations; no freedom in choice of material is encouraged and any originality on the part of the teacher is likely to produce results disastrous for his students when they go up for their examinations."³ Miss A. L. Janau, Principal of Bethune College, is not less explicit.

"Not only," she says, "is teaching unduly subordinated to examination, but good teaching would result in most cases in a failure of the students so taught to pass the examinations. It is to a large extent only by not teaching, but by passing on cram that teachers can expect to cover enough ground to ensure their students passing. Any good teaching is done at a risk."⁴

¹ Question 10. See also Mr. Brojendra Kishore Roy Chaudhury (Question 1); Mr. Promode Chandra Dutta (Question 1); Mr. Bimalananda Sen (Question 9); Dr. David Thomson (Question 1).

² Question 1.

³ Mr. D. B. Meek doubts pessimistically whether freedom would be good at present as he thinks the majority of the undergraduates are really at the school-boy stage, as judged by their mental capacity.

⁴ See answers of Bethune College, Question 9.

"The engine of examination," said the Principal of St. Paul's Cathedral Mission College—

" crushes the heart of the teacher and student alike.....The teacher is torn in two between the desire to train and liberate the often splendid capacities of his students, and his sense that he is wronging them if he does not cram them so that they will pass."¹

18. We may take it then that the teaching is compressed tightly into the limits of the examination syllabus by the overwhelming anxiety of students to pass their university examinations and of the teachers to ensure their success. Anxiety to pass examinations exists, and rightly exists, in other countries, but nowhere probably does it exert such sterilising tyranny over teachers and students alike as in Bengal.

19. To what causes is this excessive anxiety attributed by our witnesses? Chiefly to two. The first is that under existing conditions in Bengal the university degree is the one and only passport to a career for the majority of the students; the second, poverty.

20. Failure to obtain a degree means failure in life in far more cases in Bengal than it does in western countries; for in those countries a degree is but one of many portals to many careers; in Bengal it is the only portal to the most important; and the total number of careers open to a young man of promise is at present far smaller than in western countries. Agriculture is the greatest industry of Bengal, but for reasons of caste and other reasons,² it offers very few opportunities to educated men. The other industries in Bengal are still in their beginnings. It is true that in business many high caste Bengalis find employment as clerks; but on the one hand, the actual handling of goods is regarded as undignified, and on the other, business in its larger aspects has not yet been regarded by the Bengali as a great and honourable career capable of leading to the highest positions in the community. In Bengal, for the higher branches of the professions and of Government service, a degree is, with the rarest exceptions, indispensable.

21. The second reason assigned for the all-absorbing anxiety on the part of the average student to pass his examinations is poverty³. We quote from the Rev. W. E. S. Holland (whose

¹ The Rev. W. E. S. Holland, Question 1.

² Chapter XXV.

³ The general question of poverty is discussed in more detail in Chapter XIX; see also Chapter VIII, para 6.

evidence concurs with that of the Bengali teacher at Serampore College cited in paragraph 14, above :—

“ The poverty of these classes is intense. It is the determining factor of higher education in Bengal ; a poverty of which every principal has heart-breaking evidence. Education is of the nature of a family investment, to enable the recipient to feed and maintain a crowd of dependent relatives. The student can have his eye on little else Almost without exception the one anxiety is to pass examinations which will qualify for appointment to certain posts or admit them to certain professions. The one imperious necessity is to obtain the ‘ degree ’ that will keep the wolf from the door. Hunger, not for learning or development of faculties but for bread and butter is the motive behind our students.”¹

22. “ Anyhow to pass the examination, and keep bone and flesh together, not the soul, has become the cry of the hour,”² writes Mr. Pran Hari Sen, Rector of the Radhanath High English School, Dacca. The same story is told in less poignant terms by many others among our witnesses. Thus Mr. Purnachandra Kundu, Officiating Principal of Chittagong College, writes :—

“ University education (even in non-technical subjects) is the only entrance to a professional career or service under Government. The vast majority of students do not care much for learning and intellectual progress ; their aim is to pass examinations only after which can they expect to earn a living. The prospects of earning a decent living serve as the incentive to university education. Collegiate education has been spreading in Bengal mainly for this reason. Learning for its own sake is an ideal not to be expected from the majority of students.”

The object of university education nowadays, says Rai Nisi Kanta Ghosh Bahadur,¹ of Mymensingh, “ is mainly to make a livelihood. None is educated for the mere sake of education itself. i.e., for the attainment of learning, acquisition of knowledge and the highest culture in life. Passing examinations is now the only motive.”¹

Mr. Prasanta Chandra Mahalanobis¹ tells us that more than half the students find it very difficult to make both ends meet.

23. We have thus a vivid picture of the students, under economic stress, constraining their teachers into a rigid restriction of their teaching to the limits of a printed syllabus (which can only be modified with the assent of the Government of India) and obstinately closing their ears and minds to anything outside it.

24. In these circumstances it is scarcely surprising that the effort of the teacher is limited in many cases to the preparation and dictation of notes for examination use, and the effort of the student to the memorisation of these notes and of such other information as can be derived from the ‘ keys ’ denounced by the Commission

¹ Question 1

² Question 9.

of 1902,¹ which still flourish in spite of that denunciation. "The practice of dictating complete notes to students is nowhere so common as in Bengal," says Dr. Prabhu Dutt Shastri,² Professor of Philosophy in the Presidency College. Rai Radha Charan Pal Bahadur, tells us that "the teaching has degenerated into mere dictation of notes suited to be answers for examination questions."³

25. There is much evidence on this point,⁴ and it would be a mistake to suppose that the practice is limited to the classes preparing for the lower examinations.

We have ourselves heard such notes dictated in an M.A. class room. "Nowadays," says Mr. Satischandra De, Professor of English at Dacca, "even M.A. students attach importance to the notes of those who have set questions, and they read these notes to the exclusion of books."⁵ Rai Kumudini Kanta Banerjee Bahadur, Principal of the Rajshahi College, gives similar evidence.⁶ It will be seen from evidence quoted below that it would be wrong to suppose that notes are always used to the exclusion of books. Mr. Hira Lal Roy, Professor of Chemistry in the Bengal Technical Institute, writes⁷ :—

"The members of the Commission will be surprised to learn that the students preparing for the M.Sc. examination commit to memory the contents of two volumes of Richter's Organic Chemistry and Roscoe and Schorlemmer's standard works on Inorganic Chemistry."

26. There is clear evidence that the average student in Bengal has powers of memorisation that would be regarded as exceptional in Europe, that his main effort is devoted to memorisation, and that such memorisation enables him to pass the university examination (the question of distinction is another matter).

The teachers of Serampore, acquainted with western pupils, speak of the 'facile memory' of their pupils.⁸

"Students tell me," says the Rev. W. H. G. Holmes, of the Oxford Mission Hostel, Calcutta,⁹ that "the normal methods by which they are taught is through specimen questions and specimen answers Before an examination students are engaged in learning the answers to a series of probable questions which have been put into their hands."

¹ Report of Universities Commission of 1902, Section 81, pages 20 and 63.

² Question 9.

³ Question 1.

⁴ See, for instance, Mr. Atul Chandra Sen of the Ripon College. Question 1.

⁵ Question 10

Mr. R. N. Gilchrist tells us that he has been an examiner in the University for seven years, most of the time in political science and political economy, and that the text-book is practically the sole source of instruction on the subject. The instructors of the students, in this case, he says, were not their teachers—

“ but Mr. Stephen Leacock, President Wilson and—a strange combination—some such person as ‘ an honours graduate,’ whose work was sold in the bazar for a few annas. The benefits of studying President Wilson’s or Mr. Leacock’s or Dr. Marshall’s books are very great indeed, but as the Bengali student studies them the very reverse of benefit is the case. I think I can honestly say that after reading the answer-books of fifty or a hundred papers, I could have repeated large passages almost *verbatim* from the works of these authors even though I had never read their works myself The examiner’s function is to check errors of memory more than to test the ability of a student in handling a question.”¹

In answer to another question, Mr. Gilchrist writes—

“ the best student, judged by examination results, is the best memoriser. Every examination in which I have taken part is proof positive of this statement. Individuality in treating questions is a very rare thing. The examiner is more a recorder of mistakes in memory than a judge of mental calibre in the proper sense.”²

27. “ Under the present system”, says Shams-ul-Ulama Abu Nasr Waheed—

“ attention is almost exclusively directed to the development of mind which again is measured by the amount of success at a mechanical examination conducted by an external machinery and requiring more or less a reproduction of memory.”²

Mr. Surendra Mohan Ganguli, University Lecturer in Pure Mathematics, writes—

“ teaching has degenerated into dictating notes suited to be answers for examination questions, culled mostly from *bazar* notes and guides Recognition of merit depends entirely upon examination results, which again depend more upon cramming of notes than anything else.”²

Mr. Karunamay Khastgir, Professor of Mathematics in Presidency College, and University Lecturer in Applied Mathematics, tells us that—

“ with the object of securing distinctions in the examinations, the students read a fixed number of text-books, or rather some portions of text-books, questions which are likely to be set in examinations, and thus they get into a slavery which is popularly known as cramming thinking in the minds of the students, and when

field of work they make a poor show of themselves by reason of their not having any power of imagination and original thinking.”¹

28. The result, for the majority of students, of the method of teaching, learning and examination which have been described above may easily be anticipated.

“Education,” writes Mr. Haridas Goswamy, Head Master of the E. I. R. High English School, Asansol,

“ends with the university. What Spencer wrote half a century ago is still true of our education. ‘Examinations being once passed, books are laid aside; the greater part of what has been acquired drops out of recollection; what remains is mostly inert, the art of applying knowledge not having been cultivated.’ ”²

29. The Rev. W. E. S. Holland says that the desire for learning manages to survive in a few cases, as is evident from the cultured scholars of Bengal, but that—

“in most, the system breeds a positive distaste for the learning that is sought not for its own sake, but as a means to another end. It is the rarest thing to come across anyone who has the desire to continue study after taking his degrees. Books are done with and banished on the proud day of graduation. Our university system, instead of encouraging the love of learning, kills it. And this is the more tragic because there can be few peoples who have more instinctive bent or gift for intellectual pursuits than the population of Bengal.”³

Kazi Imdadul Huque, Head Master of the Calcutta Training School, writes :—

“We are trained to read, take notes and cram them, pass examinations and perhaps to think a little; but hardly to *do* anything Teaching is unduly subordinated to examination, so there are very few who really learn anything from the teaching they receive. In most cases the individual ability in life’s activities is acquired through private study, or through contact with the world after leaving the university.”⁴

30. “The years spent in passing examinations under the present system,” says Miss A. L. Janau,⁵ “are years in which entirely wrong habits of thought, of proportion, of study, are almost of necessity gradually acquired.” Dr. Jajneswar Ghosh, Principal of the Ananda Mohan College, complains that—

“(the student) has trained and developed his memory at the expense of every other faculty, and he relies on it alone as a resource of sovereign potency against the ordeal. He crams, and the facility with which he devours subjects

¹ Question 1. Other evidence in regard to this point is dealt with in connexion with ‘alternative questions’ paras. 57—63 below.

² Question 1.

³ Answer of Bethune College Staff to Question 1.

and sciences is equalled only by the facility with which he purges his mind of them as soon as the examination is over.”¹

And Mr. J. R. Barrow¹ tells us that it is the commonest of complaints that by the college system intellectual interest and originality are sterilised.

31. That the present examination system often leads to the emasculation of the intelligence is evident. “I consider,” says Mr. Sris Chandra Chatterjee, of Dacca, that—

“our University is at present producing machines and not men. Our students learn not to think in ways of their own, but in stereotyped ways dictated to them by others; and they have no individuality of their own.”¹

Mr. Jatindra Chandra Guha, Professor of English at Rajshahi, writes:—

“Though the University of Calcutta has been in existence for more than 50 years, it has produced very few men who have made new discoveries, or important contributions to the advancement of knowledge, or utilised acquired knowledge in new practical fields. The products of this University have ever been charged with a want of originality and inventiveness. Their learning has, in most cases, proved barren, for few of them have given to the world any offspring of their intellectual loins. To my mind it is the examination system of the University that is mainly responsible for this defective and abortive education imparted under its auspices.”¹

Causes of the present situation.

32. We have now to enquire how far a remedy can be found for the barrenness, and for the other evils, described above; and for that a closer investigation of their causes is necessary. We do not by any means regard all these evils as necessarily inherent in any and every examination system. On the contrary, we believe them to be in the main, curable, though in different ways. Some are, no doubt, due primarily to the examination system. Others, in the opinion of competent judges, are imposed on that system by the previous education of the students; and there are others still which are due to the students themselves, and which it would be wrong to attribute to any external circumstances. We shall consider these in the reverse order of that enumerated above.

33. We have dealt, we hope not unsympathetically, with the question of economic pressure. That pressure exists, though possibly to a less extent, in other countries. In all the modern universities of Great Britain there are hundreds of students whose

bread and butter depends on their passing of examinations. But we do not find that general closing of the ears and mind to everything that does not contribute to examination success. To quote the phrase of the staff of one of the Calcutta colleges there is, or ought to be, a 'margin of disinterestedness in study'¹ and this in Bengal, seems to be small—to the vanishing point in most cases. Mr. Radhakamal Mukerjee, University Lecturer in Economics, enumerates among the defects of the present system of education :—

"The emphasis of egoistic interests, and the neglect of communal and cultural interests" and "a general decline of moral and spiritual strength in the selfish pursuit of an education for mere livelihood which is due to the overcrowding in the professions, and consequent demoralisation, economic, and political dangers."²

The remedy for this weakness can only be found in some new moral and intellectual movement in the studentworld.

34. A certain number of witnesses regard many defects of the present system of examination as the inevitable result of the present system of secondary education. Khan Bahadur Mohammad Ismail³ thinks that, having regard to the qualifications of the teachers available in this country and the general poverty of the country, there is no alternative to the present system. "The student," says Rai Lalitmohan Chatterjee Bahadur, Principal of the Jagannath College, Dacca, "depends even more largely on bazar notes and keys, because he has never acquired the power of accurate expression or of thinking for himself."⁴ "The schools," says Mr. Barrow,⁵ "are the root of the whole trouble, and apart from the obvious defects due to lack of money, their deplorable results are due partly to the badness of the method of teaching English."

35. It has been suggested by some of our witnesses that the excessive use of memorising made by candidates in examinations is due to their inability to compose their own answers in English.⁶ Mr. Barrow puts the case convincingly in regard to history : and his answer obviously applies to other subjects :—

"It is reasonable to expect that a college student reading history will not confine himself to plodding through a single book, or part of a book, on his

¹ Scottish Churches College Senatus' answer to Question 15.

² Question 1.

³ Question 9.

⁴ For instance, Dr. P. Neogi, Question 11.

period, and trying to learn by heart, with the aid of a key or his lectures, answers to probable questions. One would expect him, under the guidance of a tutor, to refer to quite a number of books himself; to try to make himself familiar with opposing views on disputed points and to form his own views; to devote special attention to the aspects of his period which have most interest for him; and so forth. All this, properly done, will take most of his time and energy, even if he is perfectly familiar with the language in which lectures are delivered and the books to be consulted are written, and if he is doing nothing but history. If he is so unfamiliar with the language in question that he only catches a stray sentence here and there of his lectures, and takes ten or fifteen minutes to read a page of any book which he consults; if, moreover, he has, under similar conditions, to read a mass of English 'literature,' and two subjects besides, it is apparent that the task before him must be far beyond his powers. Once a good working knowledge of English were attained, I believe the tyranny which the examination system at present exercises in all subjects would largely disappear.”¹

A great deal of the 'unhealthy cram' and of the 'passive receptivity' of the Indian student, Dr. Brajendranath Seal also attributes to the fact that the student has to use a tongue not his own:—

“When you present a pistol to the candidate's head..... and bid him stand and deliver in a trice, he must keep himself primed for the occasion with the only coin you will accept.”¹

36. The question whether the mother tongue or English should be used as the medium of instruction and examination in schools and universities is too important and complex to be dealt with incidentally here, and we shall consider it in the next chapter.

37. It is clear that the difficulties of conducting examinations rationally, both at the present matriculation stage and at the higher stages, are greatly complicated by the deficiencies in knowledge, power of appreciation, and habits of intellectual study, which characterise the products of the Bengal secondary school system as it exists to-day. Here again, the remedy cannot be found in any reform of the examination system pure and simple, but must be sought partly in the reform of the secondary schools, partly in the reform of the matriculation examination.²

IV.—General functions of examinations and degrees.

38. We now come to those defects which we regard as due to mistakes in the design of the examinations themselves, both in

¹ Question 9.

² On the secondary school system and the reform of matriculation, see Chapters VIII., IX., X. and XXXI.

plan and in details; and perhaps still more to a fundamental but common want of apprehension of the true functions of examinations and degrees.

30. In this matter the general public have been too willing in the past to take universities and other examining bodies (here and elsewhere) on trust. A father hears with complete and unquestioning satisfaction that his son has 'passed his examination'; and with still more satisfaction, that he has 'taken his degree,' and the satisfaction with which the universities pass a student or confer a degree is scarcely less unquestioning. It is only in certain special cases that anyone concerned either knows or asks how the passing of the particular examination or the conferment of the degree could be expressed in plain and intelligible language, i.e., what the degree really means. It seems almost an indiscretion to enquire. But that question might well be put quite plainly, say, by a chemical manufacturer, who desired to engage a young chemist who had just graduated to undertake certain work in his factory. If by experience the manufacturer did not know what (say) a first class honours B. Sc., in chemistry, or an M.Sc., *could do*, he would if he had ordinary common-sense, go behind the degree before giving the young man the post; he would enquire what the real meaning of that degree was. And if the reply were unsatisfactory he would look elsewhere.

In our judgment, the public ought always, like the manufacturer, to feel the right to ask such questions; and the University ought always to be in a position to give clear and unambiguous replies.

If for the word examination its simple equivalent 'test' were substituted, such questions would probably be asked as a matter of course. We should at once wish to know the nature of the test and the nature of the guarantee based on it.

40. A university degree is, or ought to be, a guarantee given by the University to the public in regard to each student on whom it is conferred, the nature of the guarantee varying with the degree.

41. The guarantee is simplest to understand in the case of a technical degree like the degree in medicine. In this case the degree has a plain and straightforward, if not always a simple, meaning. It means that the University regards the student as a suitable person to practise medicine and has satisfied itself that he has a fair knowledge of the sciences on which modern

medicine is founded. The University bases its guarantee in part on the knowledge it has derived from an elaborate series of examination tests, written, *viva-voce*, practical, and clinical, including, during the earlier years, tests in the basic sciences which the University regards as essential for the understanding of the principles of medicine, and, in the later years, tests in the actual kind of problem which the medical man has to solve in his daily work. But the University and the general public realise that even an examination of this kind cannot test the whole range of the knowledge and capacity which a man must acquire in order to practise medicine successfully ; it merely tests a series of samples, both of knowledge and capacity, taken more or less at random. And these samples so chosen, if considered alone, might give unduly favourable evidence of the candidate's powers ; if he had been left to himself it might have so happened that he had studied some parts of his subject to the exclusion of others, equally vital for success in practice. He might, for instance, have learnt how to diagnose certain forms of heart-disease, but know nothing of neurasthenia or of diabetes, and yet have the fortune only to be tested in a heart-case at his final examination. The university authorities, therefore, take elaborate precautions to ensure that the chance of the sample of the knowledge of the candidate tested at the examinations being a fair one shall be very great ; they insist that before the candidate enters for the examination he shall go through a most elaborate course of training, testified by his teachers, and covering the whole field of study regarded as necessary ; and although this cannot afford any absolutely certain knowledge to the University that the student has profited by the whole of that training, it greatly strengthens the confidence with which the University gives the guarantee and the public accept it. We have chosen our illustration from medicine because it is in dealing with this subject that both the University and the public are most fully conscious of the responsibilities and meaning of the guarantee implied by the conferment of a degree.

42. In the Faculties of Arts and Science the nature of the guarantee, not only in Calcutta, but in all universities, is of a much more elusive and varied nature than in the case of a technical faculty like medicine ; and probably no university would be able to define with any approach to accuracy the meaning and purpose of the several degrees in arts or science in terms of what

it is intended to guarantee to the public that each possessor of such a degree *can certainly do*.

43. We think that such a question should be asked and answered; but we wish to guard ourselves at once from the assumption that the answer should give the complete connotation of a degree. It can only give part—though we believe an essential part—of that connotation; for, while a degree ought to connote definite capacities in all its possessors, it ought to connote much more in the majority of cases. By insisting on training under capable teachers as well as on the passing of an examination, as an essential qualification for a degree, we provide the opportunity for all candidates to acquire intellectual perspective and a wider understanding of, and sympathy with, other minds, both of to-day and of the past; but since these are things that cannot be fully tested by examination we cannot, as in the case of the capacity to do something, make sure that each student has profited by the opportunities which we have given him of such enlargement. A single example will make our meaning clear. We train a large number of students in history, and test them by examination at the end of their course. Now, by examination we are able to test their knowledge of what has been written by historians, and their capacity to read and to analyse historical documents; but no written examination can prove that a man has gained the personal insight and understanding as well as the erudition and intellectual grasp of facts essential for a historian. And it is especially in subjects like history and literature in which intelligence and feeling are fused that the examination fails most to test with certainty what we wish the degree to connote in as many cases as possible. But, recognising the limitations of examinations, there is all the more reason to apply them rationally to test those things which they can test with certainty; and to keep clearly in our mind their general purpose.

44. The present confusions of the examination systems are largely due to uncertainty as to their purpose. It may be asked why universities are content with such confusions and uncertainty—if we are right in thinking that they exist. The reply, in most cases, is simple. They are often concealed by the apparent definiteness and mathematical precision of the marking system. The university defines the percentage of marks which a candidate must obtain in order to succeed and if he obtains that percentage,

why, it may be said, should any further questions be asked ? Ought not every one concerned to be satisfied ?

45. Yet it is clear that in order to convey any intelligible meaning to the general public, and even to an enlightened public, a minimum percentage of marks ought to be translatable into some form of words ; and it is unfortunately true that the examining body would in most cases be hard put to it to give the translation. There is, as a rule, no want of good faith on the part of the examining body. It is itself deceived by the illusory appearance of certainty conveyed by figures to which it is nevertheless unable to attach any precise meaning. We could perhaps have no clearer case of the power of percentages of marks to produce the illusion of which we have spoken than that of the examination in English at the Calcutta matriculation.

46. It is rare indeed for the general purpose of a non-technical examination to be defined with any attempt at accuracy. But here the general purpose is defined in the regulations, Chapter XXX, Section 8, which reads :—

“The matriculation examination shall be a general test of fitness for a course of university studies.”

It is still rarer for the meaning of an examination test in a particular subject to be defined with accuracy. But no fault can be found with the matriculation regulations in English in this respect.

“The matriculation examination,” say the regulations, “shall be a test (a) of ability to write clear, simple and correct English, (b) of intelligent comprehension of plain modern English on familiar subjects.”

With such directions—and it would be difficult to better them—how it may be asked, can the University possibly go wrong ? A glance at the list of paper-setters and examiners shows that the University employs experienced men, fully aware of the requirements of the class-rooms, fully capable of interpreting the very plain directions given them to allow none to pass who have not the command of simple English necessary to follow the first year’s lectures, given through the medium of English. Yet the testimony that the majority of students cannot do so is overwhelming.¹ How can the experienced university examiners have so conspicuously failed in their obvious duty ?

¹ Chapter IX, paras. 27—30.

47. The answer is quite simple. In addition to the unmistakable verbal directions given by the regulations, they also contain others to which no verbal meaning is attached.

"In order to pass the matriculation examination," say the regulations, "a candidate must obtain in English either in the first paper 40 marks, and in the aggregate of the two papers 72 marks or in the aggregate of the two papers 80 marks." There are further directions in regard to marks, the 'grace-marks' regulations with which we shall deal later.¹ But there is no passage in the regulations which requires the examiners to make their marks a valid translation of the examination requirements, so admirably set out at an earlier stage. Consequently having satisfied their consciences about marks the examiners inform the University that all is well; and the University accepts that verdict. But the university public does not, and cannot, in the light of their daily experience with the students in the class rooms. The matriculation examination in English has signally failed in its purpose. And one cause of its failure is the self-deception caused by the marking system in use in this subject.

48. It might be said in defence of the University, that in the existing condition of the teaching of English in the secondary schools, the University could never have been in a position to make good the guarantees of fitness for higher studies which its regulations imply, and to which it sets its seal, but which it cannot justify in a vast number of cases; or rather that it could only have done so by rejecting in English (say) 70 per cent. of the candidates, instead of passing 70 per cent. or more.²

49. Moreover, it would be unfair to judge the University of Calcutta over-severely in this matter, for it has only followed a common practice of examining bodies. But we think it should

¹ Paras. 77-81 below.

² In 1917, 3,851 or 24 per cent. of the candidates failed in English and 1,474 or 9 per cent. failed in English only. In 1918, 5,024 or nearly 38 per cent. of the candidates failed in English, and 2,751 or nearly 19 per cent. of the candidates failed in English only. It is a very remarkable fact that it is only in English that the failures in a single subject attain significant dimensions. The failures in other single subjects (i.e., unaccompanied by failures in other subjects), in 1917 and 1918 were as follows:—1917: mathematics 22, classical languages 26, vernacular composition 28; 1918: mathematics 39, classical languages 9, vernacular composition 3. This question will be further considered in a memorandum in our volume of appendices.

be possible to improve the practice immediately, quite apart from any question of general university reform.

50. In the case of other matriculation subjects we cannot put the university guarantee to the test so definitely ; though certain conclusions may be drawn from the simple inspection of the regulations. In the compulsory paper in mathematics, only 30 per cent. of the marks is required on a paper which includes arithmetic, algebra, and geometry.¹ It is clear that a candidate might 'pass' who knew either no algebra or no geometry ; and we have come across cases of schools in which algebra is either not taught, or seriously neglected, because it is regarded as unnecessary for the examination. Even supposing that one knew that a candidate had passed in arithmetic and geometry it would be very difficult, without having dealings with a large number of successful candidates, to guess the probable attainments of a person who had 'passed' the matriculation in these subjects. It is only by the experience gained by contact with a large number of such students that one gets an inkling of the kind of guarantee that the University offers.

51. When we come to ask ourselves the meaning of 'passing' a higher examination of a non-technical character in cases where the University does not itself define that meaning (as it does in the case of matriculation) our difficulties in judging whether the University succeeds or fails in the conduct of its examinations increase. If we do not know the purpose of an examination how shall we say whether the University attains that purpose or not ?

V.—Detailed problems of the examination system.

Uncertainties of purpose and method.

52. We think we shall best pave the way for improvement if, instead of attempting to investigate fully any one examination, we draw attention, with the help of the many competent witnesses who have given us their assistance, to the uncertainties which affect every part of the present examination system—uncertainties of purpose and uncertainties of method. In Chapter XL we shall make certain proposals which, if carried out, will we hope ensure that the University shall be kept fully informed of the working of

¹ The standard of mathematics at matriculation is also dealt with in Chapter IX, paras. 17—24.

its own examination system and of the problems which it presents for solution.

53. A scientific study of the limitations as well as of the potentialities of examinations is only in its infancy.

Dr. Brajendranath Seal, in the admirable essay which he has submitted to us in answer to Question 9 writes :—

“ Among the unsettled questions relating to the theory of examination are such vital points as the following : (1) the nature, meaning and component elements of the fitness which an examination is supposed to test or measure; first in a single subject; secondly, in a number of correlated subjects; and, thirdly, in a number of unrelated (or, as is often the case, negatively correlated) subjects; (2) the nature of the curve of mental capacity, general or particular, and the correlations of mental capacities and interests as throwing light on the real value of examination curricula; (3) the nature of the curve of marks, its relation to the curve of capacity, and the dependence of this relation on the psychology of the examiner; (4) the questions of chance and error; (5) the question of the timing of an examination in relation to the course of instruction and discipline of *interim* examinations to test and ensure continuous work and of compartmental examinations *versus* a single final examination; (6) the duration of an examination, and the time scheme, in relation to fatigue; (7) the extent of allowable option of choice of questions, and of compensation as between subject and subject; (8) the relative place of written, practical and oral examinations, of external and internal examiners, of primary and secondary motives like love of knowledge and emulation; (9) the re-orientation of examinations in general, with reference to vital developments at puberty or adolescence, and (10) last, though not least, the theory and art of questioning ! ”

54. Many of Dr. Seal’s questions, as we shall see, have been dealt with by our witnesses. It will assist us in our analysis if, without going into great detail, we bear in mind the distinctions between the three of the most important ‘ component elements ’ to which we presume Dr. Seal refers, and which an examination can test :—

- (1) memorisation, pure and simple,
- (2) memorisation accompanied by understanding, or knowledge,
- (3) power of applying knowledge to some useful purpose, or capacity.

It is of course quite true that between these distinctions there is no perfectly sharp border line but, as Mr. Alfred Sidgwick has shown, this is true of most distinctions. It does not deprive them either of their validity or of their use in practice.

55. There is also another kind of distinction, not always borne in mind, which will be valuable in helping us to deal with complex problems of examination, the distinction between the complete examination and the examination by sample. It is only in comparatively rare cases that the University can conduct an examination which will completely cover the field in regard to which it desires to give a guarantee. In the great majority of cases it can only test samples of the candidate's knowledge and capacity within that field. It must therefore take such special precautions as are in its power to ensure that the samples tested are sufficiently fair and comprehensive to justify the University in giving a guarantee in regard to the whole field.¹

56. The distinction between memorisation and knowledge is one to which the University has clearly directed the attention of its examiners. We submit in an appendix,² for the sake of reference, extracts from Chapter XXV of the Calcutta University Regulations, which lays down general rules for examinations, and specific rules relating to particular faculties. We draw attention to Rules 2 and 9.

Rule 2 reads—

“ Candidates shall give their answers in their own words as far as practicable in all subjects. This rule shall be inserted as a head note in every question paper.”

Rule 9 reads—

“ Examiners, in giving marks, shall consider whether the answers indicate an intelligent appreciation of the subject or are merely the result of unintelligent memory work.”

These rules are excellent. But the whole weight of evidence seems to show that they are not sufficiently enforced in practice to be effective. Witness after witness, as we have seen above, complains that the examinations merely test memory. So long as percentages of marks accumulated in a haphazard way rule

¹ As an example of an examination which for practical purposes completely covers the field, we may instance an examination in the practical use of a language, both for written and spoken purposes. An examination of 6 or 12 hours including a *viva voce* examination will completely test the candidate's powers of speaking and writing such a language for practical purposes.

But when we deal with the question of literature it is clear that no examination of a reasonable length can possibly cover the whole field to which a student has devoted himself, say for a couple of years. An examination in literature is therefore necessarily an examination by sample.

² Volume of appendices to this report.

the day and are sufficient to allow a candidate to pass, so long will regulations like the above remain a dead-letter.

The problem of 'alternative questions'.

57. The 'problem of 'alternative questions'' mentioned by so many of our correspondents sharply raises the two distinctions which we have enumerated in paragraphs 54 and 55 above.

58. In regard to these 'alternative questions' opposite views have been expressed. Thus Mr. Benoy Kumar Sen, Professor of History in Presidency College, writes:—

"The practice of setting alternative questions should be done away with in the lower stages, *i.e.*, in the matriculation and intermediate examinations. It must be borne in mind that the underlying idea of the examination system is to find out whether the student knows everything that is worth knowing in any subject.¹ There is a minimum amount of knowledge—the essential broad principles of a subject—without knowing which a student cannot be said to possess a passable command over that subject. Questions should be set on these general principles and no alternative should be allowed. Under the existing system, an excessive use of alternative questions has made the examination a farce, for it makes it possible for a student to get a pass without knowing even half of his subject—though the university pass certificate will lead the public to think that the student knows the whole of the subject. The University is thus helping to cheat the public."²

Dr. C. E. Cullis, University Professor of Mathematics, writes:—

"The practice of giving numerous alternative questions is useful as conducing to freedom in teaching; but as its introduction was not accompanied by a raising of the number of marks required for passing, it has resulted in a lowering of the standard. In most mathematical examinations a student can pass with ease in a subject of which his knowledge is very slight by answering a few book-work questions, or a few questions which lie within a narrow range."³

Dr. Gilbert T. Walker writes in exactly the same sense:—

"I would recommend the abolition of alternatives, and that the straightforward book-work question should be largely or entirely abolished. I would like to see it replaced by either—

- (a) a question on some difficulty in a general principle that will ascertain whether it is understood, or
- (b) a fairly direct example of the working of the principle, which last should, if necessary, be indicated in brackets at the end of the question.

In this way there is nothing left to chance, the method is given and if the student cannot reply he does not understand his subject. The present

¹ We think this perhaps over-states the case.

² Question 10. This is almost the only instance in which a witness appears to consider the responsibility of the University to the public.

³ Question 10.

system roughly represents English methods greatly made easy for the worst candidates, and it ought to be much stiffened up so as to reject a number of the worst candidates.

Of course the papers that I suggest would after some years tend to become crystallised and if set unintelligently would become in time almost as bad as the present ones. But the examination system should be continually developing and so should always maintain efficiency.”¹

Mr. J. R. Banerjea, of the Vidyasagar College, writes :—

“ The papers should not contain alternatives of the description one sometimes meets with. One alternative is difficult, the other easy. Most students choose the latter, and so it turns out that, though a paper may contain problems which are a real test of ability and intelligence, many of them may be avoided and yet a student, by choosing the easy alternatives, may get high marks.”²

Mr. Karuna Kanta Das-Gupta, of Gauhati, says the system of alternative questions helps many undeserving boys to get through the matriculation and increases the number of unsuccessful candidates in the intermediate and degree examinations.³

59. On the other hand, Mr. Bipin Behari Gupta, Professor of History at Ripon College, would give a liberal allowance of alternative questions ; and other witnesses, Mr. Suniti Kumar Chatterjee, University Lecturer in English, Mr. Abdul Jalil, and Mr. Z. R. Zahid Suhrawardy, agree with this view, though they give no reasons for it.¹

60. The two views are not inconsistent. If we wish to test a candidate’s range of knowledge over a wide field of which we do not, and cannot, expect him to know the whole by heart, this is a case where alternative questions are fully justified. On the other hand, it is obviously unreasonable to set any alternative to a question testing knowledge which we regard as essential for every candidate who should be allowed to pass. Even more unreasonable is it to set a question testing pure memory as an alternative to a question testing capacity, or ‘ an intelligent appreciation of the subject.’ Here again the existing marking system fails. There is no reason why a question involving fundamental knowledge should not, although only forming part of a paper, be made itself a crucial test, and headed by the rubric ‘ students are required to pass in this part of the paper.’³ But this alone would not serve.

¹ Question 10.

² Question 10. Among the witnesses who support this view may be quoted Khan Bahadur Maulvi Ahsanullah, Mr. Kishori Mohan Chaudhuri and Rai Rajendra Chandra Sastri Bahadur.

³ Mr. Kishori Mohan Chaudhuri makes a suggestion on these lines in his answer to Question 10.

As Dr. Walker rightly points out, it is necessary for fresh types of questions to be continually invented, in order that the tests of intelligence may remain efficient, and not evadable by methods of memorisation.

61. Such a solution as we suggest, though it could not be introduced drastically for a year or two, would have an immense effect on the whole of the session's work in the colleges. As soon as students discover that mere memory work will not carry them through their examinations; they will begin to use the intelligence which they neglect so greatly under the present system. In every subject, if examiners will take sufficient pains, it is possible to invent questions which, though straightforward, and not of the nature of a puzzle, cannot be prepared for in advance. We would especially direct attention to the report of Mr. Stanley Leathes' Treasury Committee on the Civil Service (Class I) examinations¹ and to the specimen paper on English which it contains, devised to test general intelligence. The particular paper is no doubt one that would be unsuitable for the majority of Indian university students, but it suggests what might easily be done in this way in Indian universities.²

¹ Published by H. M. Stationery Office (Cd. 8657—3d).

² The *Times* of 22nd January 1919, reports an interesting departure at Columbia University, New York:—

“A selective draft system for eliminating the mentally inert from entrance into Columbia University has been decided upon by the University Faculty. Hereafter, psychological tests based on the Binet formula, modified by the tests of the American War Department, will be enforced upon all applicants for matriculation at Columbia. This action has been decided upon in order to reject students who lack capacity for education thus saving their own time and the Faculty's, and providing room for other students who have the intellectual right to a university career.”

It is stated that the American army has used psychological tests in officers' training schools for many years and that their feasibility has been demonstrated. The report quotes the following statement by Professor Jones, head of the department of admissions at Columbia:—

“Examinations will be held as formerly, but in the opinion of the Faculty, many who can comply with the traditional requirements of admission do not make good university material and such applicants we hope to exclude. It has been found that many students in the preparatory schools could be coached to pass university entrance examinations, but some of them had not the mental capacity for further profitable education. It is better for them and for the University that they should stay out and get into a more suitable environment where they can make something of themselves.”

62. Since students are now convinced, and it appears not without reason, that any reading outside the syllabus may endanger their chance of distinguishing themselves in examinations, it is the business of the University to remodel its examinations in such a way that the only chance for a student to distinguish himself will be by his reading widely and outside any prescribed syllabus, and by thinking intelligently about his reading; at any rate the papers should be framed so as to offer special opportunities to such students.

63. Many of our correspondents suggest that the papers might demand answers in the form of short essays.¹ It seems clear that unless these questions, like the paper proposed by Mr. Leathes' Committee, deal with fresh material actually placed before the candidate for criticism, many answers to possible questions would be memorised in advance as at present. Mr. Syamacharan Ganguli has given us a striking instance of what can be done in this way:—

“Even at the highest examinations borrowed criticisms may be passed off as original. Very long ago I heard from a graduate of the highest distinction that he had reproduced *verbatim* at his examination a translation given him by his very distinguished professor of a criticism on Scott in a French Review and so he got credit for the French reviewer's ideas and for his professor's English.”²

Systems of marking.

64. We shall now come to closer quarters with the actual system of assigning marks adopted by the University, spoken of by many of our witnesses as the 'mechanical system' of marking.

It is described by Mr. G. C. Bose as follows:—

“At present, at all the examinations, from the highest to the lowest, each question is marked; and at the time of examining the answers, each answer is divided into so many points and the total number of marks allotted to the question is sub-divided among the points—just what a horse-dealer does in judging a horse. This method of valuing the answers takes away from the examiner the liberty of judging the answers as a whole and makes the examination wholly mechanical. To my mind all the answers given to one set of questions should be judged as a whole and valued accordingly, either by assigning marks in a lump or better still by assigning remarks such as

¹ Mr. P. Basu, Professor of Economics at Indore, in his answer to Question 10, says “the answers should be like so many essays evidencing the capacity of the student to sustained logical thought.” Other witnesses who have made similar suggestions are Mahamahopadhyaya Dr. Satis Chandra Vidyabhusana and Mr. Rajendranath Vidyabhusan, Mr. Siti Kantha Vachaspati and Mr. Ross Masood.

² Question 9; see also Mr. R. N. Gilchrist's evidence quoted in para 26 above.

deserving a 'third class,' or a 'second class,' or a 'first class,' or 'no class' at all. All first class marks or remarks may subsequently be judged or valued if necessary to settle the order of merit."¹

Rai Sahib Bidhubhusan Goswami, Professor of Sanskrit in Dacca College, (who rightly points out that the object of the system is a laudable one) writes :—

"The existing methods of university examinations are of a mechanical character. The present practice of allotting marks to questions and their sub-sections, though adopted with the object of doing the maximum justice to the examinee's work, is attended with an injurious effect. The examiner has to give some marks, however low they may be, to the answers of the questions and their sub-sections, provided the answers are partly or fully correct. These marks, or fractions of marks, when added together, often come up to the minimum pass mark; and the examiner has no choice but to pass the examinee, though the quality of his work is insufficient for a pass."¹

The staff of the Serampore College completely endorse the evidence just quoted :—

"We desire to draw attention to the fact that the kind of paper now sometimes set makes it necessary to mark in a highly mechanical way. An examiner often feels when he has come to the end of the paper he has examined, that the examinee should fail, but on reckoning the marks assigned—many of them for little details that are no real test of ability—he finds that pass marks have been secured, and the present system thus compels the examiner often to pass candidates whom he deems unworthy. If the proposals we have made be carried out tests of ability would inevitably tend to take a less mechanical form."

Mahamahopadhyaya Pramathanath Tarkabhusana, Professor in the Sanskrit College and University Lecturer in Sanskrit, says :—

"Not rarely is it found that a mechanical system of assigning marks, both integral and fractional, results in the failure of a candidate who deserves to pass, and in passing another whose only merit is his imperfect and scrappy knowledge of everything and depth in none. This is not to deny the advantage which such mechanical marking otherwise enjoys in reducing the effects of eccentricity in examiners to the attainable minimum. Examiners ought to be allowed freedom in determining, after the whole paper has been examined, whether the candidate deserves a pass or what division he is entitled to. The use of this freedom is no doubt to be checked by the powers of supervision and revision by the head examiner or Board of Examiners."¹

Sir Gooroo Dass Banerjee, in his book on the *Education Problem of India*,² quotes a particular instance of injustice done to candidates by the mechanical system of marking, discovered during an

¹ Question 10.

² Pages 164 and 165.

enquiry into the causes of a high percentage of failures at the entrance examination. Among other witnesses who have condemned the mechanical system we may mention Mr. Jaygopal Banerjee¹, Mr. P. Basu,¹ Mr. Charu Chandra Biswas,¹ Mr. Bipin Behari Gupta,¹ Dr. Nares Chandra Sen Gupta,¹ Kazi Imdadul Huque,¹ the Rev. W. E. S. Holland,¹ the Indian Association,¹ Mr. S. K. Rudra,¹ Mr. Satish Chandra Sen,¹ and Mr. H. Sharp.¹

65. A reference to some of the directions to examiners printed in the Volume of Appendices² will illustrate fully the criticisms of the witnesses whom we have quoted, but a single example may be quoted here.

66. A question in a recent intermediate examination on the history of Greece and Rome ran as follows :—

“ Indicate the characteristic differences between the constitutions of Athens and Sparta.”

The instructions to examiners read thus :—

“ 1. Athens democratic, Sparta oligarchic. 2. Athens progressive, Sparta conservative. 3. Difference in the machinery of Government : e.g., king and ephors in Sparta, etc. 4. Athens commercial and intellectual : Sparta military. Any three points : 4 marks each.”

Now the intelligent student would suppose that this question meant what it said, and that he was expected to describe and compare the systems of government of the two cities. But if he did so with the utmost clarity and fulness, he would only have covered two of the four points which the examiners were instructed to look for, and would only get 8 out of 12 marks. Another student who dealt however briefly with the vague generalities of points 1, 2 and 4, (the last of which, at any rate, seems entirely irrelevant to the question), and said nothing at all about the systems of government, would get full marks ! The good student is penalised ; the student who has learnt brief notes by heart without understanding his subject is rewarded.

67. Also at a recent intermediate examination the following was one of the questions set in English history :—

“ To what extent did Henry II and Edward I contribute towards the development of the administrative and judicial machinery of England ? ”

This is a very hard question to set to young students, who cannot fairly be expected to understand the working of mediæval

¹ Question 10.

² Volume of appendices to this report.

'administrative and judicial machinery.' Still, they would deserve credit if they knew that Henry II was the real inventor of the jury system for a number of different purposes, that he strengthened the machinery of the shire-courts, that he brought the sheriffs under the control of the king's central court, and sent justices round the country to make this control more effective. And they might perhaps also be expected to know that Edward I did his best to strengthen the king's courts against those of the feudal barons, that he greatly improved the police system, and that his reign saw the real establishment of parliament. But this is not the kind of knowledge expected. Here are the instructions to examiners for marking the question :—

Henry II—

1. Constitutions of Clarendon. 2. Assize of Clarendon. 3. Assize of Northampton. 4. Grand Assize. 5. Assize of Arms and Scutage.	} $1\frac{1}{2}$ marks each; any four.
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Edward I—

1. Statute of Westminster I. 2. Statute of Gloucester. 3. Statute of Mortmain and church relations. 4. Statute of Westminster II. 5. Statute of Winchester. 6. Statute of Westminster III. 7. Model Parliament.	} 2 marks each; any three.
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There is no indication as to the degree of comprehension of the aim and contents of these measures which the candidate must show before being awarded his $1\frac{1}{2}$ or 2 marks. Manifestly he could not be expected to know the contents of some of Edward I's very miscellaneous statutes. It seems fair to assume that a mere mention of the names of these enactments would suffice, and that if they were not named no credit would be given. Observe the result. A candidate can get full marks on Henry II without mentioning any of the things which we have enumerated as really important in his reign. On the other hand, he might give the most admirable description of these things, showing that he really understood in a general way (and that is all that can be expected from an intermediate student) the significance of the reign, and

not get a single mark. He might get full marks for Edward I by setting down "Statute of Westminster I, Statute of Westminster II, Statute of Westminster III," and never mentioning Parliament! In other words, the instructions given were so devised as to encourage the memorising of absolutely useless, because unexplained, facts and actually to discourage an intelligent treatment of the question asked. We do not hesitate to say that the candidate who gave the kind of answer rendered possible, or even suggested, by these instructions would, in a better type of examination, receive no credit at all; and that the kind of answer which ought to be encouraged might, under these instructions, receive no marks at all.

68. The origin and the justification of a system of this kind in the eyes of those who work it, can only be that when as many as 20 or 30 assistant examiners are employed for the correction of one set of answers it is the only way of ensuring 'equal treatment' by different examiners. The argument may seem plausible, though there is ground for doubting whether even that 'equality of treatment' is secured. But is not the equality in any case purely illusory? Is it not attained by marking for mere memory and neglecting everything else, so that it is not the answers as a whole that are marked equally, but those portions of them for which a minimum of intelligence is required? Is it not evident that in this system of marking we have one of the main causes for the dictation of 'complete notes,' the use of 'keys,' and the sterilisation of teaching in Bengal, to the ruin of so many promising intelligences?

69. Fortunately, we have evidence that all Boards of Examiners do not blindly follow this system; nor does the same Board always follow it in the same rigid fashion.

70. We quote from a recent set of the rules for examiners for the matriculation English, second paper. The candidates were required to give in simple English the substance of certain passages in prose and verse and the direction to examiners was to—

"read the whole answer, marking, as you proceed, the grammatical, orthographical and other errors. Examine how far the leading ideas are brought out, and then value the answer as a first, second or third class performance. Marks: 1st class, from 15 to 20, 2nd class, from 8 to 14, 3rd class, from 1 to 8."

71. Another example may be quoted in the rules drawn up for the examination of the first half of the third pass paper in English for the B.A. which read as follows :—

- “ 1. Each answer should be judged and marked as a whole for matter and composition.
- 2. The substance or purport and the aim or underlying thought should be judged as a whole. If the latter is not separately given but sufficiently brought out in the course of the answer such treatment should be accepted.
- 3. Mere paraphrase should not be accepted as a full or adequate answer.
- 4. No marks should be given for answers which entirely miss the meaning and purpose of the passage.
- 5. If one or two relevant points are merely brought out in an answer which as a whole is wide of the mark, nominal marks should be given.”

72. We also print in our appendix volume the ‘ General Rules ’ for the logic examination forming part of the intermediate examination in arts in 1917, from which we extract the following :—

- “(1) Each answer is to be considered as a whole as well as part by part ; and, in assigning marks, the impression produced by the whole answer should specially be taken into account.
- (3) The part values are to be treated as movable so that excellence in one part may be taken as compensating for deficiencies in another.
- (6) Before putting down the total value for an answer, we should consider whether the answer as a whole is worthy of pass value and before putting down the aggregate value of a paper as a whole we should consider whether as a whole it is fit to pass. Any increase or decrease of the aggregate value as a result of discretion should be noted on the cover.”

73. If such directions as those just quoted had been carried into effect in every subject there would probably have been less outcry from the critics. Yet even the most excellent rubric, without a right tradition behind it, and above all the sense of responsibility which the University owes to the public, will avail little.

74. The whole theory of ‘ marking ’ is a difficult and abstruse subject which, as Dr. Brajendranath Seal points out, has not yet been sufficiently investigated, and it is only by further experiment and investigation that the practice can be improved. We believe, however, that the plan recommended in the directions quoted in paragraph 70, viz., that of dividing answers, according to the Oxford

system, into 3 or 4 classes,¹ and of then assigning numerical marks, is more likely to give concordant values with different examiners than the process of first assigning marks, ranging, say, from 1 to 20, and of then assigning a class to the answer according to the numerical mark assigned. The assignment of marks in the first instance tempts the examiner into the system just condemned, of searching for the various component parts of an answer and assigning to each part marks and fractions of marks. The sum of such marks in the majority of cases, does not represent the resultant impression on the mind of the examiner, which is the ultimate criterion of its 'value.' Not infrequently a candidate, though he may make a correct statement in one part of an answer, may make another in a second part which proves conclusively that he did not understand what he was writing about in making the first statement; the value of his answer as a whole is zero; but under the present system he gets marks for it. Sir Gooroo Dass Banerjee, in his valuable book on the *Education Problem in India*, makes the ingenious suggestion that marks should first be assigned to each answer on the analytic method, *i.e.*, by the summation of the marks allotted for its component parts; and then by the synthetic method, *i.e.*, on consideration of the question as a whole; and that the mean of the two should finally be awarded. But unless negative marks are awarded for want of comprehension, the system would not yield satisfactory results.

75. Various correspondents have suggested that special excellence in an answer should receive due recognition, which is impossible under the mechanical system.² This contingency is contemplated in the logic regulations quoted in paragraph 72 above; and the suggestion may be conveniently carried out, either by providing a margin of marks unallotted to special questions, for 'general impression', or by making the sum of the marks

¹ Under the Oxford system the four classes, α , β , γ , δ are often further sub-divided by the addition of the symbols + and —.

² By the mechanical system we understand our witnesses to mean a system in which in its strictest form no discretion is left to the judgment of the examiner. Under such a system the answer expected to each separate part of a paper is defined beforehand as nearly as possible, and definite marks allotted to it; so that no margin is left for any 'special excellence' which could not be foreseen and which by its nature must be left to individual judgment to appraise. (See the evidence of Mr. G. C. Bose quoted in para. 64, above.)

for the questions treated separately exceed the maximum allowed for the paper¹ as a whole.

76. Conversely, Mr. Ramesh Chandra Majumdar, Assistant Professor in History in the University, suggests that the—

“negative marking system should be introduced to discourage cramming, i.e., if any gross mistake is committed in answer to one question not only would no credit be given to that, but some marks would be deducted from the total. This would bring home to every student the risk of depending upon notes alone without having a general and accurate knowledge of the subject.”²

This further contingency is also provided for by the logic regulations quoted in paragraph 72 above.

Compensation.

77. Our attention has been called in the written evidence by Mr. W. C. Wordsworth and Mr. H. Sharp to the system of ‘compensation’ or ‘grace’ marks, in accordance with which a candidate who has failed in one subject only by not more than 5 per cent. of the full marks in that subject, and has gained a certain percentage of the aggregate marks for the examination is allowed to pass. Mr. Wordsworth writes :—

“All grace marks and other contrivances for helping through the incompetent should be discontinued.”³

78. In addition to the grace marks, it is provided in the case of the matriculation examination and the examinations up to and including the bachelor’s degree in arts, science, law and engineering (but not in teaching or medicine)—

“that if the moderators [or examiners, as the case may be]⁴ are of opinion that in the case of any candidate not covered by the preceding regulations consideration ought to be allowed by reason of his high proficiency in a

¹ Thus, if the paper consists of 10 questions of equal value of which 5 are to be answered and the maximum for the paper is 100 marks, each question might be allotted 25 marks. This procedure, which is sometimes adopted, implies that though a student is permitted to reply to five questions, he may obtain full marks by answering only four with distinguished excellence; and the rubric at the head of the paper should state this explicitly. The chances of a student getting over 100 marks per cent. on a paper marked on this scheme are so small as to be negligible. If he were in that happy position, his marks could be reduced to 100 without injustice.

² Question 10.

³ Moderators, in the case of the matriculation and the intermediate examinations in arts and science; examiners, in the case of the other examinations referred to. The regulation relating to moderators is given in the regulations quoted in the volume of appendices to this report, under the heading “Arts and Science Examinations” section 8.

particular subject or in the aggregate, they shall report the case to the Syndicate, and the Syndicate may pass such candidate."

79. The question of compensation is not altogether a simple one. In the case of a final examination, in which the University appears to guarantee to the public that the student has some knowledge (if not a very well defined knowledge) of all the subjects in which he 'passes,' any compensation should be confined within very narrow limits. To give a certificate to a student that he has passed in (say) mathematics or botany, if he has only obtained 25 per cent. of the marks in that subject (the ordinary pass-mark being 30) is to make it impossible to interpret what the university guarantee means; and when this pass mark may be still further lowered by the Syndicate in special cases it is quite clear that unless the actual marks are furnished to the public (a course which we do not advocate) the information given by the University when it tells them that a student has 'passed' the B.Sc. examination in (say) mathematics or botany, is so vague as to be of little value in respect of that subject. A head master would certainly be unwise to engage a graduate to teach the subjects in question in his school on the mere strength of such information.

80. But the aims of examinations at the end of a school or intermediate college course and of an intermediate university examination are somewhat different from those of degree examinations and the questions of compensation must be considered with reference to the special aims of each examination. For good or for evil, an examination at the secondary and even at the higher secondary stage, is often used not so much to ensure that each candidate shall acquire a knowledge of each subject that shall be of real use, as to ensure that the subject shall not be neglected,¹ and that those candidates to whom it is congenial or useful shall have a fair opportunity of studying it; and the curriculum is apt to be rather overweighted in certain cases on this account. In such cases a pupil may consciously or unconsciously have to choose between special excellence in one or more subjects for which he is particularly gifted and a fair average of attainment all round which

¹ "To make any subject compulsory in an examination in order to guard against its neglect is not the ideal method of obtaining the best education, but in the present condition of affairs it seems to be the most efficacious method we can find"—said Sir J. J. Thomson's Committee on the position of Natural Science in Education (Natural Science in Education, H. M. Stationery Office, 1918, section 35).

will ensure his passing in all subjects. We think that at the matriculation (or, as we prefer to call it, the 'high school examination') stage it would be wise to allow a board of examiners, or of representatives of the examiners in, all subjects, to apply at their discretion and within defined limits the principle of compensation and to allow special excellence in one branch of study to compensate for some degree of failure in another. The adoption of such a principle has been recommended by Sir J. J. Thomson's Committee on Natural Science in Education.¹

81. The guarantee given by an intermediate university examination² is a guarantee given, not so much to the public as to the student, a guarantee to him that he is fit to continue his proposed course of studies ; and hence the treatment of a particular subject should depend on the extent to which that subject is essential for his future course. We think that excellence in an intermediate examination as a whole might quite reasonably be allowed to compensate for deficiency in a non-essential subject ; but that it might be a cruel leniency to allow such compensation in the case of an essential subject, involving the student in future waste of time and money. In a relatively small teaching university it is of course easy to ascertain in the case of each student what course he proposes to take after the intermediate stage. In a large examining university this is more difficult, though perhaps not impossible.

In any case, we feel, in pursuance of this principle, that grace marks to the extent of 5 per cent. should not be allowed in subjects which are compulsory both at the intermediate and the final examination. A candidate marked 5 per cent. below a minimum of 30 per cent. cannot be regarded as a 'border-line' case. He is clearly below any reasonable border-line. Possibly, at all examinations examiners might be instructed to mark 'border-line candidates' with a particular symbol, so that these cases might be individually considered in the light of their aggregate marks, or of special excellence in another subject.

General question of leniency.

82. We have mentioned the question of leniency. If an examination is regarded as a prescribed test and a degree as a

¹ See the pamphlet quoted in the footnote opposite, sections 34 and 35.

² We are speaking in general terms of intermediate university examinations. Our view of the proper function of the present intermediate examination is dealt with in Chapters XXXI and XXXII.

guarantee given by the University to the public that the student has satisfied that test, leniency may mean that the University, to use the strong expression of a witness quoted above 'cheats the public.' How little some of the public realise the situation is shown by the following passage from our evidence.

"Examiners ought to show more leniency to the examinees; and in that case more students would pass and that would do *no harm to the Government or to any class of people.*"¹

83. Some of our witnesses tell us that inside the University the case is as little realised, and that tender-hearted examiners report an undeserving student as having passed, out of a sense of pity. It should be made clear that this sense of pity is indulged not at their own expense but at the expense of the public, as well as of the more deserving students. The Rev. J. C. Forrester, Fellow of Patna University, referring to the fact that the principal object of most parents in sending their students to college is to obtain a well-paid Government post, writes:—

"This calls in a false sentiment of pity; it gives rise to the following kind of argument. 'The student is poor; if he fails in this examination, his prospects will be blighted.' Therefore he must be allowed to pass if possible."²

Neither of the above witnesses is connected with the University of Calcutta. But Mr. W. C. Wordsworth, Principal of the Presidency College and Officiating Director of Public Instruction for Bengal, makes the following grave statements, which cannot be ignored:—

"The University does not command complete confidence. . . . There is a suspicion, sometimes vocal, that the published results of examinations are not invariably in accord with the work done. This suspicion is due in part to the system of grace marks formulated in the regulations, partly to the readiness of examiners' meetings to attend to complaints or representations from individual candidates, and generally to show indulgence."

84. As we have pointed out in an earlier passage, the gravest fault of the present marking system is that it tends to conceal from the university authorities and from the examiners alike their responsibility to the public and to the students themselves. To give a university guarantee to a student not entitled to it, is not only to lower the reputation and tarnish the honour of the University, but, by so doing, to do a grave injustice to the many deserving

¹ Sahebzadah Mahomed Sultan Alum, Question 9. The italics are ours.

² Question 15.

students who have legitimately, and not through a mistaken sense of pity, won their degrees.

Checking of marks.,

85. Before leaving the subject of marking we have to point out that there is no system of checking the numerical marks awarded by examiners, such as exists elsewhere; hence, in dealing with the very large number of candidates, a certain number of answers are bound to be overlooked by the examiners and a certain number of mistakes in addition of marks will also inevitably occur. The University recognises these facts, and in two ways. In the first place, when a candidate has failed in one subject only his papers in that subject are re-examined. In the second place the University communicates to any person who may apply for them within six months of the examination the marks which have been allotted to any candidate, on payment of a small fee,¹ and on payment of a fee of Rs. 10 the University has the marks checked under the supervision of a specially appointed person, on the application of a candidate supported by the authorities of his college. Mistakes are detected in this way and are rectified by the Syndicate, but the rectification sometimes takes months to effect, and a very grave injustice is done to the candidate, who is kept in a state of uncertainty, and debarred from beginning his college course if the examination in question is the matriculation, from continuing it, if it is a higher examination. It is a minor injustice, in comparison, that the fee is not returned to the candidate in cases where the investigation shows that the university examiners have made a mistake and are to blame. We investigated the papers laid before the Syndicate in regard to a certain number of such cases. It is clear that the absence of any checking system and the delay in dealing with complaints in regard to errors committed are matters which require consideration.

Examination 'by compartments.'

86. It is a well recognised feature in the administration of law in civilised countries that an excessive penalty on the one hand is

¹ We understand that the fee now charged is Rs. 2 for a return of marks in each subject and Rs. 4 for a return of marks in each paper.

likely to lead to undue leniency on the other, and many of our witnesses are of opinion that the penalty for failure at university examinations is now unduly severe—mainly in three respects. If a student fails in a single subject at any examination (except in the Faculty of Medicine or, under quite recent regulations, in the Faculty of Engineering), he is obliged (1) to take the whole course of study in all his subjects over again, unless he is specially excused and allowed to enter as a private student, (2) to take the whole examination over again in all his subjects, (3) to wait for a whole year before he can re-present himself (except in law). We shall discuss these questions separately.

87. The plan of examination in one or more subjects 'by compartments' was considered and condemned by the Indian Universities Commission of 1902 in the following terms:—

"The system which is called 'examination by compartments' has been advocated by several witnesses, and in particular it has been represented to us that a candidate who fails in one subject should be allowed to pass on satisfying the examiners in that subject, and should not be required to bring up all his subjects again.

After full consideration, we have come to the conclusion that the disadvantages of the Madras rule outweigh its advantages, and that examination by compartments ought not to be allowed. The object of an examination is to ascertain whether the candidate possesses all the knowledge which may fairly be expected of him at the stage which he has reached; and a man who passes in all his subjects at one time gives better evidence of the soundness of his general education than the man who can only pass in the subjects taken separately. Care must be taken, in framing the programme of an examination, to see that the subjects are not so numerous as to lay an undue burden on the minds of the candidates; but if this condition is complied with, we think it better that the examination should be treated as a whole, and not broken up into sections."¹

88. It will be seen that the recommendation of the Commission amounts to this, that no latitude should be given to any individual student to take the university examination at a given stage in parts, either (1) by being allowed to present himself in the first instance for different parts on different occasions, or (2) by being allowed to re-present himself in a part in which he has failed, without taking the whole examination over again.

89. The Calcutta University has acted in accordance with this principle except in regard to the medical examinations, in which,

¹ Report of Indian Universities Commission, page 52. Under the 'Madras rule', referred to, the B.A. curriculum was divided into three 'divisions', and a student was allowed to appear in one, two, or all three in the same year.

following general university precedent in medical faculties, the examination in the final subjects may be taken, under certain conditions, in parts, if the candidate so desires. In 1917 it adopted regulations for the Faculty of Engineering on lines somewhat similar to those in medicine.

90. The question of examination by compartments was raised again in the scheme of the Dacca University Committee, who dissented from the recommendation of the Universities Commission. They expressed the view that the single examination in several subjects at the end of the course "looms too largely in the career of the student, and he is tempted, as he approaches the obstacle, to overcome it by an heroic effort of cram." They suggested that the B.A. examination might be taken in parts at the option of the candidate and that if he failed in either subject of the first part at the end of the first year, he should be allowed to re-present himself in it at the end of the second. On the other hand, as a make-weight against this concession, the courses and examinations were to be made more difficult.¹

91. A considerable number of our witnesses have expressed themselves in favour of examination by compartments, but very few arguments have been adduced either for or against it.²

92. Mr. Prasanta Chandra Mahalanobis would allow an honours student to take the examination in his subsidiary subject before his final year, so as to be able to devote all his attention to his honours subjects; and in regard to practical examinations he expresses himself as follows:—

"In certain cases, for example, in certain portions of the pass practical examinations, the system of 'compartments' should be introduced. Until the practical examination in a subject is capable of being conducted in a quite satisfactory manner, it unfortunately sometimes will happen that a candidate will fail in the practical test more or less for accidental reasons. It is a serious waste of energy to make all these candidates go through the whole course of

¹ Report of Dacca University Committee, page 25.

² The following have expressed views in favour of examination by compartments in answer to Question 10:—

Mr. Sasi Sekhar Banerjee, Principal of the Krishnath College, Berhampur; Mr. Haridas Bhattacharyya; Mr. Charu Chandra Biswas; Mr. Ramananda Chatterjee; Mr. Suniti Kumar Chatterjee; Mr. Hem Chandra Ray Chaudhuri; Dr. Kedarnath Das (who quotes Sir William Osler in support of his view); Mr. Bipin Behar Gupta, Mr. M. Azizul Huque, Mr. Prasanta Chandra Mahalanobis, Mr. Panchanan Majumdar, Mr. Baikuntha Chandra Ray; Mr. Hira Lal Roy, Mr. Kalipada Sarkar, Mr. Surendranath Das Gupta, Dr. Prabhu Dutt Shastri.

studies again, before coming up for their examination. A candidate who, although securing high marks in the theoretical, fails in the practical should be allowed to take his practical examination alone and should be exempted from the theoretical paper."¹

93. Sir Gooroo Dass Banerjee thinks that to pass in all the prescribed subjects at one examination is a proof of greater mental capacity than passing in them successively in different examinations.

94. The question is a complex one, of which no general solution seems to be acceptable for all candidates alike. It is frequently discussed with reference only to the ease or difficulty of the examination in question and without reference to the efficiency of the student at the end of his university course. Yet it is held by some authorities that the average student gains more by concentrating his attention on one or two subjects at a time than by spreading it over three or four. In the University of Manchester, great freedom is allowed in regard to the subjects of the pass B.A. course; and in the University of Paris the subjects for the *licence* may now be taken separately. In the University of London, the final medical examinations for the M.B., B.S. degrees may be taken in two parts; the subsidiary subject for the B.Sc. honours examination may be taken before the principal subject; and students of the Royal College of Science (now forming part of the Imperial College of Science and Technology) are allowed to take the subjects of the internal intermediate examination in science singly, the syllabus in each subject being more extensive than the ordinary syllabus; and at a number of the other intermediate examinations a student ejected in one subject may be permitted, on the recommendation of the examiners, to re-present himself in that subject only.

95. For some students, a time perfectly free from the anxiety of examinations more than compensates for a heavier burden at the end; for others, examination by compartments is more advantageous. We are inclined to the view that the practice adopted in the medical faculty of the University of Calcutta and in other medical faculties is the right one, and that reasonable latitude should be given to students in the matter. The same procedure is not necessarily the best for all students. There is no suggestion that a medical student who takes his examinations

take the whole examination again a whole year afterwards if he fails even in one subject, is absurd. A rule like that is all very well for a student who has unlimited time and means, but it is too hard a rule for the type of student with whom we are dealing. It cannot by any stretch of the imagination be said to meet the actual needs of this Bengali student who is so desperately poor and often so physically weak and short-lived."

99. A very large number of witnesses have dealt with this question from different points of view: Mahamahopadhyaya Pramathanath Tarkabhushana¹ suggests that allied subjects should be grouped, and that students who have failed in one subject of the group might be allowed to re-present himself in that subject before the term is at an end. Some, like Mr. Manmathanath Banerji, would not allow students to take subjects in which they have failed separately, unless they have obtained more than 40 per cent. of the aggregate marks and have not failed in more than two subjects.¹ Mr. Gopal Chandra Maitra,¹ Principal of Victoria College, Narail, would only excuse the reappearance of a rejected candidate in subjects in which he obtained first division marks.²

100. We have not space to discuss the variety of suggestions made on this important point, but we think that there is force in Mr. Jnanendranath Mukherjee's argument quoted in paragraph 97 above; and there would be much more force in it if the University made its examinations well defined tests of capacity as well as of memory. Sir Gooroo Dass Banerjee is, no doubt, justified in regarding a candidate who can hold in his mind a number of facts in regard to a large number of subjects as superior *pro tanto* to a person who can only hold in his mind facts relating to a smaller

¹ Question 10.

² Among the witnesses who have expressed opinions on this point are (a) in answer to Question 9 : Mr. N. C. Bardaloi, Mr. Jogendranath Bhattacharya (who in the case of rejection in a single subject would accept the certificate of a principal, given on the results of an examination conducted three months after the failure), Mr. Wahed Hossain, Mr. Purnachandra Kundu ; (b) In answer to Question 10 : Dr. Abdurrahman (who does not favour examination by compartments generally, but advocates 'reference'); Nawab Nasirul Manalek Mirza Shujaat Ali, Khan Bahadur, Sahebzada Mahomed Sultan Alum, Mr. Muruly Dhar Banerjee, Mr. Ramananda Chatterjee, (whose suggestions in regard to work for certificates other than degrees in the case of rejected students deserve attention); Mr. Hem Chandra Ray Chaudhuri, Mr. Bamapada Dutt, Mr. Surendra Mohan Ganguli, Mr. Devnprasad Ghosh, Mr. Abdul Jalil, Maulvi Abdul Karim, Mr. Panchanan Majumdar, Mr. Khagendra N. Mitra, Mr. B. Mukherjee, North Bengal Zamindars' Association; Mr. Surendra Nath Roy, Dr. Tej Bahadur Sapru, Mr. Satish Chandra Sen (who would only exempt from re-examination in subjects in which 45 per cent. of marks have been obtained); Mr. Panchanan Sinha and Dr. Z. R. Zahid Sulhawardi.

number of subjects. But simultaneous memorisation of a large number of subjects is much less important in these days of cheap books and libraries than it was formerly; and at the best, we know that the facts memorised to-day may be forgotten to-morrow. If however the examination is a test of the *capacity to do something which is not easily forgotten* (we may choose for example, the capacity to translate a piece of unseen English prose into Bengali) and the candidate shows that he can satisfy that test, it is really waste of his time and of that of the University to make him pass the same test a year later.

Question of re-attendance at courses by students who have failed.

101. The question whether students who have failed at an examination, it may be only in a single subject, should be made to attend the whole course over again, as demanded by the University under present regulations, is a serious one. The Senatus of the Scottish Churches College say with reference to the intermediate and B.A. examinations:—

“ We are of opinion that any student who has once been sent up for the examination should be allowed to appear in future years also without having to attend further classes; or at least without having to attend classes other than those in the subjects in which he has failed.

The present arrangement whereby students are required to attend lectures covering the same ground as they have already gone over encourages carelessness and inattention on the part of these individuals and is demoralising to the classes of which these individuals form part.”¹

A very large number of witnesses concur in the opinion of the Scottish Churches College staff, though they mostly put forward the view of the student rather than of the college.

102. Taking the point of view of the University, we should say that its guarantee implies (except in the case of ‘ private ’ students with which we shall deal separately) that the successful student has not only passed a prescribed examination but has received a systematic training approved by the University. We see no reason why for the purpose of that guarantee a rejected student should be required to take a course of study for a second time in the subjects in which he has passed. Even in a subject in which he has failed it may be unnecessary, if his failure is due to illness or some accidental cause. We do not suggest that the University should

¹ General Memoranda, page 113.

take cognisance of such cause ; but we think it may reasonably be left to the teachers of the student and to himself to decide whether it is in his interest to take the course a second time and to see that he does not forget the subjects which he needs for his future work. There is another point of view, apart from that of the university guarantee. It may be thought that a student who is only required to take a course in a single subject will be 'at a loose end,' and fritter away his time. In accordance with our general view of college responsibility, we think it should be for the college authorities to see that this does not occur. We share in general the view of the Scottish Churches College quoted above. On the other hand we think a student ought not to be debarred from attending a course for a second time if he so desires it. We may point out that the relaxation of the present rule would greatly relieve the pressure on the class-rooms.¹

Frequency of examinations.

103. The only examinations in the University which are held more than once a year are the examinations in medicine and in law up to and including those for the bachelor's degree. These examinations are held twice a year, doubtless in view of the total length of the curriculum and the desire not to extend it unduly. A considerable number of witnesses² have suggested that in the interests of candidates who fail, all examinations should be held twice a year, or oftener. The hardship of having to wait a year before re-presenting themselves in the case of poor students has been already pointed out.³ On the other hand, a university examination is expensive in time and effort for the university staff—not only for the administrative staff, but also for the teaching and examining staff ; and we should hesitate to make a general recommendation that each examination should be held twice a year. It will be for the re-constituted university to consider how

¹ We are informed that the Senate in 1910 submitted draft regulations to the Government of India under which reattendance at courses by candidates who had failed might have been excused by the University in certain cases, but these regulations were not sanctioned by Government.

² Mr. N. C. Bardaloi and Mr. Purnachandra Kundu in answer to Question 9, and Maulvi Abdul Karim, Sahibzadah Mahomed Sultan Alum, Mr. Mannatharath Bannerji, Dr. Kedarnath Das, Dr. Abdurrahman and Dr. Nares Chandra Sen Gupta in answer to Question 10.

³ Para. 98 above.

far the multiplication of examinations is feasible without undue labour and expense.

Aegrotat degrees.

104. A certain number of our witnesses have suggested that the University should confer aegrotat degrees, that is, that degrees should be conferred on students who have qualified to present themselves for the degree examination but have been debarred from doing so by illness. The witnesses suggest that such degrees should only be conferred on the recommendation of the teachers of the students in question.¹ We feel that the conferment of such degrees would be open to serious objection.

Limitation of number of appearances at the same examination.

105. At the present moment no limit is placed by the University on the number of occasions on which a candidate who has failed may re-present himself for examination, except in respect of the preliminary scientific and first M.B. examinations of the Faculty of Medicine. At these examinations it is provided that a student who has failed four times within two years shall not be readmitted except on the special recommendation of the 'Principal of the College.'²

106. Dr. Nares Chandra Sen Gupta has suggested to us that unlimited opportunities for failure should not be given to candidates in any examination. He proposes that not more than three chances at the utmost should be given in any examination, and that for the M.A. and M.L. and other examinations which ought to connote a high degree of ability not more than two chances should be given to any candidate. Under the present system, he tells us, candidates have been known to appear seven times at the same examination. He objects to such repeated candidatures on the ground that the prolongation of the period of education is an economic loss to society, which is deprived of the services of the pupil; and that it should not be permitted unless the individual shows special talent and that he is capable of improving by

¹ Mr. A. C. Chatterjee in answer to Question 10 and Mr. Horace B. Dunnicliff and Mr. Herambachandra Maitra in answer to Question 9.

² We presume this was intended to apply to the Calcutta Medical College; there is now a second college affiliated in medicine, the Belgaum Medical College.

education; whereas perpetual failures in examinations are proof to the contrary.¹

Mr. A. C. Chatterjee would only allow students to appear once for an honours degree and twice for any other examination.¹ Mr. Purnachandra Kundu would give each candidate a maximum of three chances.¹

107. The practice of different universities in this matter varies greatly. In the older English universities and some of the modern a candidate is only allowed to present himself once for an honours examination for the bachelor's degree. If he fails to obtain honours he goes without a degree in some cases, but in others is allowed to present himself for a pass examination. In certain universities, such as the University of London, a candidate who fails at any examination may re-present himself on any number of future occasions without limit. We shall deal with the matter further in Chapter XL, paragraph 35.

Suggestions for increasing thoroughness and diminishing uncertainties of examinations.

108. Various suggestions, in addition to those already discussed, have been made to us with the object both of increasing the thoroughness of examination-tests and of diminishing their liability to errors due to chance. We shall now deal with the questions of *viva-voce* and practical examinations, 'library examinations,' the allotment of marks for course-work, and for research-work; and then with the participation of teachers in examinations and the constitution of boards of examiners generally and their methods of carrying out their work.

Viva-voce examinations.

109. A very considerable number of witnesses have suggested that more use should be made of *viva-voce* examinations than at present. It seems remarkable that no *viva-voce* examinations are held in the University of Calcutta except in the Faculty of Medicine. There are not even *viva-voce* examinations in modern languages. Mahamahopadhyaya Pramathanath Tarkabhusana writes very justly:—

“The necessity of an oral and conversational test ought to receive recognition. An oral test calls into play special qualities on the part of students.

¹ Question 10.

Facility of expression, steadiness of nerves, reading of recollection have all their use in after-life. As the University perpetuate itself by training able teachers, and as teaching is the art of communicating ideas, the need of an oral test, especially in the higher stages, is easily established."¹

Mr. H. Sharp¹ expresses the view that a *viva-voce* examination is essential as a supplement to written work and should take place, if possible, after the valuation of the written work. Mr. Saratlal Biswas, Assistant Professor of Geology in Calcutta University,¹ suggests that the *viva-voce* should be used especially to test range of knowledge; Mr. Baikuntha Nath Bhattacharyya,¹ that it should be used to test depth of knowledge as well as other qualities. Mr. G. C. Bose¹ suggests that in post-graduate examinations a *viva-voce* should be conducted by two examiners, one internal and one external. Mr. Patrick Geddes warmly advocates the public defence of the thesis for the doctorate, in the effective form in which it is used in the University of Paris.² We may draw attention to the use made in some universities of *viva-voce* examinations to enable the examiners to come to a decision in border-line cases. It is possible to use the *viva-voce* for such a purpose in examinations where the numbers are too great for it to be used as a general test.

Practical examinations.

110. We note that practical examinations are not compulsory in science subjects at the intermediate examination, we understand because of the difficulty and expense of holding practical examinations for so large a number of candidates. A number of our witnesses are of opinion that practical examinations should be entirely dispensed with, on the ground that a student may not do himself justice at such an examination; and other witnesses suggest that the marks awarded to the student in his practical course-work should be counted to his credit by the University in

¹ Question 10.

² Other witnesses who have given evidence on *viva-voce* examinations are Dr. M. N. Banerjee, Principal of Belgachia Medical College, Rai Kumudini Kanta Banerjee Bahadur, Rai P. K. Basu Bahadur, Mr. Baikuntha Nath Bhattacharyya, Mahamahopadhyaya Kaliprasanna Bhattacharyya, Mr. Charu Chandra Biswas (who would use *viva-voce* in doubtful cases), Mr. Santosh Kumar Chatterjee, Mr. Brojendra Kishore Roy Chaudhury, Mr. R. N. Gilchrist, Mr. Hem Chandra Das Gupta, Mr. Amrita Lal Gupta, the Rev. W. E. S. Holland, Mr. Benoy Kumar Sen, Dr. Prabu Dutt Shastri, Mr. E. E. Vredenburg, Mr. K. Zachariah (Questions 9 and 10).

the degree examination. We are fully of opinion that practical work demanding a long time to carry out cannot be easily tested in a university examination, and that the record of such work should be demanded of the student, duly certified by his teachers, and shown to his examiners. But we think that in all scientific subjects, whenever possible, the University should make itself responsible for some test of practical work. A sufficient amount of time however should be allowed in the examination for a candidate to be able to retrace his steps, if his experimental work in the first instance suffers from an accident. At least twice the time necessary for the performance of the work required for a bare pass should, as a rule, be allowed.¹

Library examinations.

111. We are altogether in agreement with witnesses like Dr. Nares Chandra Sen Gupta² and Mr. Hem Chandra Das Gupta² who suggest that in the higher examinations, such as the B.A. honours, M.A., M.Sc., and M.L., an attempt should be made to test the ability of the student to use reference books, and that the students should be permitted the use of a library in answering certain questions in some subjects, at any rate. In such cases the students should be required to give exact references for all statements derived from the books they use. The main difficulty would arise in dealing with the large number of candidates.

Course-work.

112. The question of counting course-work as a qualification for a degree has been discussed by many of the witnesses. Kazi Imdadul Huque, Head Master of the Calcutta Training School, writes :—

“ Passing an examination is now entirely dependent upon the result of the final examination. But it should not be so. The career in school or college should also be taken into account; and in special cases, students may be declared to have passed an examination on their school or college report only.”²

Dr. Gilbert T. Walker goes further and says :—

“ I consider that the ideal system is the replacement of examinations by lecturer’s certificates. If a student has been industrious and has consistently done the work given him by his lecturer, he has earned a recommendation from him which ought to be more trustworthy than marks got in

¹ See also para. 114 below.

² Question 10.

an examination. A student's merits should thus more accurately be given by the teacher's certificate than by an examination in which the accidental element is liable to play an important part. Further the teacher would not be tempted to 'cram' his pupils and could more easily aim at giving them the best education in his power.

The disadvantage of this alternative system is obvious ; that the temptation of a teacher to favour particular pupils, and to give to his own men credit for more than they are entitled to, might be strong. I think it would be unsafe to introduce it as yet into Calcutta in connexion with university examinations though for examinations confined to members of one college it does not seem to me impossible.....

In general the elementary examinations should be kept up and the more advanced modified or abolished. Thus it may be convenient to have a fairly-easy examination in mathematics to be passed by all students in engineering, physics, economics and higher mathematics ; this might have a large number of candidates and such an examination may avoid difficulties. On the other hand advanced examinations (for science M.A.'s or M.Sc.'s) might be replaced by lecturers' certificates and a dissertation."¹

We shall deal with the last suggestion made by Dr. Walker in another section.

113. Dr. Adityanath Mukerjee¹ pleads for the counting of records of college examinations, partly to ensure regular habits of work, partly to protect the student against the personal equation of examiners. He thinks such results should be used, as a negative safeguard, to ensure that no candidate should be rejected in a subject in which he fails by a few marks to reach the prescribed minimum, if his college record shows good work. We have dealt elsewhere with the question of the minimum percentage of marks.

114. We think that in cases where candidates present themselves from different colleges there are considerable difficulties in allotting marks at university examinations for college records or class work, except for such work as can actually be 'shewn up' to the university examiners, and certified as being the result of the candidate's own efforts in the class-room, e.g., engineering-drawings. But the suggestion made by Dr. Adityanath Mukerjee² (and also by Dr. Hassan Suhrawardy³) that college records might be taken into account in border-line cases is worthy of serious consideration especially in connexion with the smaller examinations.³

¹ Question 9.

² Question 10.

³ Among the witnesses who recommend either that course-work, or the records of college examinations, should be taken into account by the University are the following :—

In answer to Question 5 ; Mr. Sasi Sekhar Banerjee (who suggests that laboratory work during the two years previous to the examination should count), and

Research work.

115. A number of our witnesses have suggested that a thesis should be made necessary for the M.A. examination (e.g., Sir R. G. Bhandarkar, Mr. Amvika Charan Mazumdar, Dr. Prabhu Dutt Shastri and Pandit Hargovind Das T. Sheth)¹. Other witnesses go even further and would allow students to submit a thesis for the B.A. and B.Sc. examinations. Mr. Ramananda Chatterjee¹ quotes the example of English universities in support of such proposals.

116. On the other hand, Mr. Jyotibhushan Bhaduri and the two other professors of chemistry at the Presidency College think that M.A. and M.Sc. candidates offering theses should also be required to pass theoretical and practical examinations.

117. Under the present system there is much to be said for this last proposal; but if our suggestions with regard to the specialised B.Sc. and B.A. honours degrees are adopted we think that the students' range of knowledge and technique in practical work ought to be amply tested by such examinations, and that students who present satisfactory theses for the master's degree might in appropriate cases be exempted from a written examination except possibly on subjects immediately connected with the thesis. Thus, for instance, a candidate presenting a thesis for the M.A. degree on a subject connected with history might be required to satisfy the examiners in a paper dealing with the period of history within which his subject fell.

The present practice of allowing students to present a thesis for the M.Sc. degree in lieu of a portion of the M.Sc. examination, and of requiring a thesis for the doctorate in all Faculties has not been challenged.

Mr. Santosh Kumar Chatterjee (section E of his reply) : in answer to Question 9 ; Mr. Surendra Chandra Banerji, and Mr. Purnachandra Kundu, Mr. Bhupan Chandra Das and Mr. Baikuntha Chandra Ray and Mr. K. G. Naik : in answer to Question 10 ; Mr. Umacharan Banerji (who would take physical exercises and moral capacities into account), Mr. Charu Chandra Biswas, Mr. Chinta Haran Chakravarti, Mr. Kamini Kumar Chanda, Mr. Ramananda Chatterjee, Mr. Hem Chandra Das Gupta, Mr. Patrick Geddes, Mr. Amrita Lal Gupta, the Indian Association, Calcutta, Mr. Panahanan Majumdar, Rai Mahendra Chandra Mitra Bahadur, Mr. Hira Lal Roy, Mr. Akshaykumar Sarkar, Dr. Nares Chandra Sen Gupta.

¹ Question 10.

Boards of Examiners.¹

118. We have to point out that in the University of Calcutta a distinction is established between those responsible for drafting and setting the examination papers, who are termed 'paper-setters,' and those responsible for the marking of the scripts, the 'examiners.' The body of 'examiners' may, but does not necessarily, include 'the paper-setters.' We shall ourselves use the term 'examiner' (except when otherwise indicated) to denote a person who is responsible, either wholly or partly, both for setting the papers at an examination and for the correction of the scripts sent in by the candidates. But our witnesses have naturally used as a rule, though perhaps not always, the terminology of the Calcutta University. We think this indication will avoid any serious misunderstanding on the point in question.

119. The method of appointment of paper-setters and of examiners for all examinations but the M.A. and M.Sc. is described in Chapter XXV of the university regulations; the method now adopted for the M.A. and M.Sc. examinations is set forth in Chapter XI of the regulations, which was revised in 1917.

120. The appointment of examiners in the cases dealt with in Chapter XXV rests with the Syndicate. The procedure formally prescribed in order to bring before the Syndicate a list of names of actual and possible candidates differs somewhat in law, medicine and engineering from that prescribed in other cases; but we understand that in practice the same procedure is adopted throughout with a view to bringing up as many names as possible of suitable candidates. In the case of matriculation and all examinations up to and including the bachelor's degrees in arts and science, all Fellows who are members of the Faculties of Arts and Science, and all principals of colleges affiliated in arts and science not members of those Faculties are asked for reasoned recommendations of suitable persons. The recommendations together with applications from candidates received by the

¹ By a Board of Examiners we mean the body of persons to whom the University entrusts the responsibility for setting the papers and marking (or of finally approving the marking of) the answers for a particular examination. Such a board may be appointed to act for a single examination, or for a year, or for more than one year. We give this explanation so that the term 'Board of Examiners' may not be assumed necessarily to mean a permanent board.

Registrar, are then referred to the relevant board of studies for report ; and the board is asked to nominate for appointment a number of persons not less than that required for the examination nor more than half in excess of that number. The Syndicate then considers all the names on the lists together with the report of the board of studies on them ; but the Syndicate is not limited to the consideration of these names. In law, medicine, and engineering the procedure for the selection of examiners, as stated above, is similar ; but it is specially provided that 'the Dean of the Faculty for the time being shall be *ex-officio* 'President of the Examiners' for the occasion.

121. Although the regulations for examiners in Chapter XXV of the regulations were not amended when the revised form of Chapter XI was sanctioned, the provisions of the latter Chapter override those of Chapter XXV in respect of the M.A. and M.Sc. examinations. The selection of internal examiners¹ is prescribed by regulations ; the external examiners are appointed by the Executive Committee of the Council for Post Graduate Teaching in Arts or in Science, as the case may be, on the recommendation of the Higher Board of Studies concerned (see University Regulations, Chapter XI, especially Sections 4, 16 and 31).

122. Some complaints have been made to us in regard to the actual selection of examiners. If these complaints were justified (and we have not thought it our business to investigate individual cases) we think the fault must be with the judgment or voting of the bodies concerned, and not with the general procedure.²

123. In regard to the participation of teachers in the conduct of examinations the University of Calcutta has adopted different principles in dealing with different Faculties, and in dealing with different degrees in the same Faculty.

124. For the matriculation and for the intermediate examinations and for the bachelors' examinations in the Faculties of Arts and Science, no one may be appointed to set a paper in a subject of which he teaches the whole or a part for the corresponding examination, though he may correct the scripts in that subject. We understand that this regulation originated from a decision of the Syndicate in 1890, based on the report of a committee appointed to

¹ Para. 124 below.

² See evidence of Mr. W. C. Wordsworth, Question 10.

enquire into the 'premature disclosure' of certain questions at the F.A. examination. The questions disclosed related to certain passages in Sanskrit and English. The good faith of the teachers who acted as examiners was not impugned; and they both maintained that it was their duty as teachers to draw attention to the passages in question. The Committee reported 'that the lesson to be drawn seems to us to be that henceforth no gentleman should be appointed to set an examination paper in a subject of which he teaches whole or a part,' and the Syndicate adopted this recommendation.¹

But for the master's degree in the Faculties of Arts and Science² a joint board of internal and external examiners is formed, the internal examiners being the university lecturers in each subject of the examination, *i.e.*, the actual teachers.

The regulations for the preliminary, intermediate, and bachelor's examinations in the Faculty of Law are identical on this point with those for arts and science. But for all examinations in medicine and engineering the system of having both internal and external examiners (if possible) is adopted.

"Of the persons appointed to set papers in any subject for any examination," say the regulations, "one at least must be a teacher or professor in that subject and one, at least, whenever available, shall be a person not teaching that subject for that examination."

125. The difficulties experienced by a conscientious teacher and examiner who takes part in an examination both of his own pupils and of those of other teachers are familiar to all teaching universities. They are perhaps greatest in setting passages from prescribed books. But the difficulties are found to be much diminished, in the first place, by sharing the responsibility of setting papers between one or more teachers and an external examiner, and, in the second place, by having the papers set (though this is often not possible), after the conclusion of the corresponding course of work.

126. A few of our witnesses wish that only external examiners should be employed;³ a few, on the other hand, appear to wish to exclude external examiners altogether, and to limit the examiners

¹ Minutes of the Syndicate of 24th May 1890.

² See Regulations, Chapter XXV, Sections 6 and 7, under the heading "Arts and Science examinations."

³ *E.g.*, Mr. Govinda Chandra Bhawal, the Rev. A. E. Brown, Mr. Kishori Mohan Chaudhuri, Mr. Devaprasad Ghosh, Maulvi Mohammad Irfan (Question 10).

to the actual teachers of the candidates.¹ But the majority appear to be in favour of joint boards of internal and external examiners,² although many of them are of the opinion that only persons actually engaged in teaching should be employed as external examiners. Dr. Bimal Chandra Ghosh declares roundly that

"good teachers should be preferred, as they alone make good examiners. This is more true of oral and practical examinations."³

The same opinion is expressed, if not as decidedly, by Mr. Ravaneswar Banerjee,⁴ Mr. Promode Chandra Dutta,⁵ Mr. Bidhubhushan Goswami,⁶ Mr. R. N. Gilchrist,⁷ Mr. Amrita Lal Gupta,⁸ and the Rev. Father Crohan of St. Xavier's College.⁹

127. Mr. J. M. Bose¹⁰ points out that the employment of external examiners only for the first degree examinations tends to stereotype the papers, to play into the hands of the authors of keys, and to prevent the teachers from introducing new methods into their teaching. He writes:—

"There is a regulation in the Calcutta University that no person engaged in teaching any subject will be appointed a paper-setter in that subject. The object of the regulation is no doubt to prevent giving an undue advantage to those students who had the privilege of attending the lectures of the paper-setters. The result is that the Syndicate appoints paper-setters who are not in touch with the capabilities of the present generation of students. In setting a paper these external examiners are entirely guided by the questions which were set in the previous years. Thus the standard of the examination does not change and as a matter of fact it is quite easy for a student to guess what the questions will be next year simply by looking over the questions of the previous years. This is exactly the course followed by the authors of 'model questions' and that is why these cheap publications are so popular with the students. The teachers are thus considerably handicapped, and do not know how to introduce some freshness in their lectures to suit a system of examination, the nature of which remains the same every year.

While I say this I do not by any means suggest that external examiners should not be appointed. On the contrary the appointment of such an examiner is extremely necessary to encourage the students to acquire as wide a knowledge as possible of the subject, and also to take some interest in those portions of the subject which were not covered by the lectures. But in setting papers the co-operation of all or at least some of the teachers should be invited."¹¹

¹ See evidence of Mr. Charu Chandra Biswas, and Mr. G. H. Mazumdar (Question 10).

² See, e.g., evidence of Brij Kumudini Knauti Banerjee Bahadur, Mr. Manmathanath Banerji, Mr. Surendra Chandra Banerji, Bithune College, Mr. Krishnachandra Bhattacharya, Mr. G. C. Rao, Mr. N. N. Dey, Dr. P. Neogi, Mr. Juges Chunder Hui, Mr. K. Zachariah (Question 10).

³ Question 10.

⁴ Question 10.

Mr. R. N. Gilchrist writes on somewhat the same lines:—

"Examiners," he says, "are appointed who are forced by their own ignorance of, or rustiness in, their subjects to set questions from the prescribed books in a way most acceptable to the crammer."¹

128. Our attention has been drawn to the size of the examining boards in some subjects. Thus, for the matriculation English second paper there were in 1916 one head examiner and 25 'examiners'; for compulsory mathematics at the same examination there were three paper-setters, one head examiner and 31 'examiners.' In logic for the I.A. and I.Sc. examinations there were 3 paper-setters, and there were for the first paper 1 head examiner and 12 'examiners' and for the second paper, 1 head examiner (the same as for the first part) and 11 'examiners' (all different from those for the first paper).

Under the new scheme for the M.A. and M.Sc. examination the number of examiners in English, in mathematics and in Sanskrit, were for 1918, 24, 18 and 32, respectively.

129. These boards appear to us to be too large for the effective discussion of examination papers or of class lists. We understand that the examination papers are often settled by the paper-setters without consultation with the board.

130. On the question of M.A. boards, Mr. K. Zachariah writes as follows:—

"In the M.A. the theory seems to be that each lecturer should set the paper on his subject. The result is the examining board is very large, about 15 or 20, and never meets once the papers are allotted.² There might be the same question in two papers and there is no way of discovering or altering it. Also, the students confine themselves often to the lecturer's notes. I should propose that small boards of 4 to 7 members should set the papers in any subject in consultation. These boards should be composed mainly or wholly of teachers, and half the number should be changed every year, so that every teacher gets his chance sooner or later. Again, it will perhaps be a good thing occasionally to entrust a part or the whole of a subject to external examiners from other universities."¹

Question of concordance of marking by assistant-examiners.

131. The large number of examiners appointed to correct scripts—and the number must be large where there are many

¹ Question 10.

² We understand that this statement does not hold good of all Boards of Examiners for the M.A.

as unsatisfactory. The staff of Serampore College, who agree with the views put forward by other witnesses that meetings of examiners are necessary to settle (or 'moderate') the papers, express themselves as follows :—

" We consider that a system of moderation is necessary even in the higher examinations in order to secure a reasonable degree of uniformity. With this end in view we attach importance to meetings of examiners in especially arranged groups. Examiners and paper-setters living a long distance from Calcutta have now a real grievance, as their travelling expenses are not met. We think it would be to the interest of the University to treat examiners with liberality. More efficient work would in our judgment be secured if the fees of examiners and paper-setters were put back to the scale in existence under the old regulations. We are afraid it must be admitted that the character of the average man's work, even in the educational sphere, is largely dependent on the money paid for getting the work done."¹

If more meetings of examiners are to be held, and as seems reasonable, the travelling expenses of the members are defrayed, the reasons for limiting the size of boards of examiners in accordance with the suggestion of Mr. K. Zachariah² is strengthened.

Classification.

133. There are striking discrepancies in the practice of different universities in regard to the use of 'divisions' at matriculation and at the intermediate examinations in arts and science (there are no divisions at the pass B.A. and B.Sc. examinations). That the Calcutta University acts on different principles from other universities which classify matriculates will be clear from the following table (derived from Mr. Findlay Shirras's figures in our volume of General Memoranda and Oral Evidence) :—

University and year.	No. of candidates.	Class I.	Class II.	Class III.	Total no. of passes.	Percent- age of successful candidates who ob- tained a first class.
<i>Calcutta</i> —						
1914	11,289	2,949	3,149	657	6,755	43.7
1915	12,457	3,653	3,279	554	7,486	49.8
1916	14,058	4,326	3,342	494	8,102	53.0
1917	15,876	5,790	4,690	642	11,131	52.0
1918	14,490	4,995	3,155	400	8,550	58.4

¹ Question 10.

² Para. 130 above.

University and year.	No. of candidates.	Class I.	Class II.	Class III.	Total no. of passes.	Percent-age of successful candidates who obtained a first class.
<i>Allahabad</i> —						
1914	3,163	21	488	842	1,351	1.6
1915	3,604	11	414	862	1,277	0.9
1916	3,960	6	282	755	1,043	0.6
1917	4,363	10	425	728	1,103	0.8
1918	4,107	3	245	601	849	0.4
<i>Punjab</i> —						
1914	4,020	340	1,564	673	2,577	13.2
1915	4,748	317	1,675	715	2,707	11.7
1916	5,659	275	1,958	829	3,063	8.9
1917	5,884	456	2,567	886	3,900	11.0
1918	6,020	400	2,211	934	3,545	11.3
<i>Patna</i> —						
1918	3,620	640	637	389	1,600	38.4

134. We shall not examine minutely into these discrepancies, but shall consider the case only of Calcutta. The division assigned is dependent on the aggregate of marks obtained by the candidate. Out of a maximum of 700 marks candidates who obtain 350 or more are placed in the first division, those who obtain from 280 to 349, inclusive, are placed in the second division, and those who obtain from 250 to 279 inclusive, are placed in the third division. The reason for the smallness of the third division is obviously the smallness of the difference between the upper and lower limits by which it is defined—only 29 marks.

135. If there are to be divisions at all in matriculation examinations, a first division ought clearly to imply more than the average of excellence attained by the whole body of successful candidates. At the Calcutta matriculation about half of those who pass obtain a first class. We are inclined to the view that two divisions would suffice; and we think that the lower limit of the first division ought to be so fixed that considerably less than the majority of those who pass are likely to attain it. A percentage of from three-fifths to two-third of the aggregate marks in the compulsory subjects would probably mark a suitable lower limit for a first division.

136. The following figures for intermediate examinations (also derived from Mr. Shirras's tables) show similar discrepancies, in the practice of different universities, though in this case there was only a small difference between the Madras and the Calcutta figures for 1914:—

APPENDIX B TO PART III.

University of Degrees	Institutions in States										Percent of degrees awarded in each state
	State of origin	Conn.	Mass.	Conn.	Mass.	Conn.	Mass.	Conn.	Mass.	Conn.	
<i>Conn.</i>											
1910	0	304	0	129	0	266	0	214	0	32	0
1915	0	424	0	177	0	374	0	272	0	43	0
1916	0	424	0	174	0	374	0	271	0	43	0
1917	0	426	0	174	0	374	0	272	0	43	0
1918	0	426	0	174	0	374	0	272	0	43	0
<i>Mass.</i>											
1914	0	221	0	227	0	109	0	102	0	17	0
1915	0	220	0	171	0	108	0	102	0	17	0
1916	0	222	0	171	0	108	0	102	0	17	0
1917	0	224	0	170	0	107	0	101	0	17	0
1918	0	224	0	170	0	107	0	101	0	17	0

137. At the B.A. pass examination there are no divisions but candidates who obtain 500 marks out of a total of 1,000 for the four subjects of examination are awarded distinction.

138. But classification in pass examinations is of less importance than in honours examinations, where the candidates are not only arranged in classes but in order of proficiency (or 'order of merit' as it is frequently termed) in each class.

Mr. Karunamay Khastgir, Professor of Mathematics, Presidency College, says that—

"the low standard required to be attained in the master of arts examination, *viz.*, 50 per cent. has caused a great depreciation in the value of the degree and consequently in the attainments of the recipient of the degree."¹

139. Mr. Hira Lal Roy, Professor of Chemistry in the Bengal Technical Institute, writes :—

"To cut down the undue importance attached to the results of examinations, the names of the students getting first and second class honours should be published in their respective classes in alphabetical order and not in order of merit. It is rather a wonder how the University can distinguish between the merits of students by two or three marks. The system is unjust and unsound ; it appears more so when we know that this result decides the career of a student in after life."²

Mr. K. Zachariah² makes a similar criticism, and adds that the existence of rank leads to much unhealthy rivalry, disappointment, and suspicion of the examiners, while students and others attach, at present, an entirely fictitious value to the first place in the first class. Mr. Zachariah does not care for the compromise of the Cambridge system which provides divisions within classes. Mr. Jnanendranath Mukherjee,² of the University College of Science, thinks that the anomaly of a third class M.A. and M.Sc. should be removed. He states that the third class M.A. is not regarded as fit to do any teaching work in the University.

140. We think these criticisms deserve serious consideration. It is, however, to be noted in regard to the question of arrangement, both in respect of the standard for a first class and the order of names in classes, that, as Dr. Arthur Schuster³ has pointed out, the abolition of order of proficiency or merit may lead to an artificial distinction between the last man in the first class and the first in

¹ Question 1.

² Question 10.

³ In an article in the *University Review* (since discontinued) for May, 1905.

the second, between whom the gap may be only a small one. We are disposed to think that this disadvantage is more than counterbalanced by the advantages of adopting alphabetical order within each class, especially if the distinction between a first class and a second class man is made to depend rather on quality and individuality of the work done than on the quantity ; for in this case there is generally found to be a fairly clear border-line between first class and second class candidates.¹

Anonymity of candidates.

141. We have received not only in written evidence,² but in verbal evidence given by a number of deputations at the towns which we have visited, protests against the practice of requiring students to write their names on their answer-books in addition to their roll-numbers. The protest comes, very largely, from representative Musalmans who think that Muslim candidates suffer under some disabilities as compared with Hindu candidates when the answers are corrected by Hindu examiners. Khan Bahadur Muhammad Ibrahim writes :—

“ The practice of putting down only the roll-number of candidates and not their names on their answer papers may be advantageously introduced to ensure justice and fairness in examination matters in a country which is inhabited by peoples of different communal interests.”³

Nawab Syed Nawabaly Chaudhury has drawn our attention⁴ to the case of two students, one a Hindu, the other a Musalman, each of whom according to this statement obtained 359 marks at the B.A. examination in 1916 (the minimum for a pass being 360) when the Hindu candidate was passed and the Musalman was rejected, in spite of the fact that the Hindu candidate’s marks ‘were made up in part of 9 grace-marks.’⁴ We have been furnished

¹ Dr. Gregory’s dissent from this view is expressed in Chapter XL, para. 28, footnote.

² The following witnesses, in answer to Question 10, have expressed the opinion that roll-numbers should be written on the answer books in lieu of names : Maulvi Tassadduq Ahmed ; Taslimuddin Ahmed, Khan Bahadur ; Nawab Nasirul Mamalek Ali, Mirza Shujaat ; Sahebzada Mahomed Sultan Alum ; Maulvi Abdul Aziz ; P. Basu, Mr. A. K. Fuzlul Huq ; Kazi Imdadul Huque ; Maulvi Mohammad Irfan ; Khan Bahadur ; Mohammad Ismail, Sister Mary Victoria. The same opinion was expressed by deputations from the Musalmans of Assam, Berhampur, Calcutta, Chittagong, Comilla and Rajshahi. See General Memoranda, pages 207—218.

³ Question 10.

⁴ Paras. 77-81 above.

with an extract from the proceedings of the Syndicate of 29th March 1917 relating to these cases, which includes a report furnished by Mr. Jnanchandra Ghosh and Mr. Biraj Mohan Majumdar, at the request of the Syndicate. The report shows that the two candidates referred to both obtained 359 marks and were both rejected in the first instance ; that both applied for a scrutiny of their marks (see paragraph 85 above) ; and that while the addition of the marks of the Muslim candidate was found to be correct, the marks in one of the history papers of the Hindu candidate had been put down as 49 instead of 55, and the Syndicate thereupon passed the latter candidate. The report states that all the candidates at this examination received 6 additional marks in English by the order of the Board of Examiners in English and the Syndicate, and that there was no difference of treatment of the two candidates in this respect.¹ We understand therefore that the 9 'grace-marks' referred to in the Nawab's statement are made up of these 6 marks for English (which were given to both candidates), together with 3 marks which were awarded to the Hindu candidate on re-examination of his papers in English, under a rule that when a candidate fails in a single subject his papers are immediately re-examined in that subject.²

The case has directed our attention incidentally to the anomaly in the regulations under which this particular safeguard is applied in the case of students who fail to pass in one subject but not in the case of students who pass in all subjects but fail to obtain the minimum required on the aggregate of marks ; but this does not strictly affect the question at issue. It seems clear to us that the case to which the Nawab has drawn our attention shows no evidence of inequality of treatment on the grounds of race ; and no other such case has been brought to our notice. Dr. P. J. Brühl, the Registrar of the University, stated in his oral evidence that in his opinion there was no bias of the kind suggested.³

142. Dr. Brühl expressed to us an objection to the use of roll-numbers on the ground that if a student made a mistake in writing his roll-number on his answer-books serious confusion might arise.

¹ We understand that these 6 marks were awarded under Chapter XXV, Section 17 of the University Regulations.

² Calcutta University Regulations, Chapter XXV, Section 7.

³ General memoranda, page 494.

We do not regard this objection as insuperable. Mr. A. H. Harley, Principal of the Calcutta Madrassah,¹ suggests that a slip should be attached to each answer-book on which the student should enter his name and number ; that on the answer-books he should enter his number only : that at the time of collecting the answer-books the invigilator in charge should see that the numbers correspond : and that the slip should then be detached by the invigilator and sent to the Registrar for safe custody until after the issue of the results. Mr. Haridas Bhattacharyya¹ makes a more complex suggestion, namely, that an arbitrary number should be put on the answer-books of each candidate by the Registrar, presumably in order to make it impossible for any candidate to communicate his examination-number to an examiner.

143. An examination should, if possible, be either wholly anonymous (and we think this should be the case with the matriculation taken in its present form) or else the whole of the previous academic history of the candidates should, as far as practicable, be made known to all the examiners concerned ; and examinations in a residential university should be conducted on the latter lines. It is clear that in examinations of which a practical examination or a *viva-voce* forms part, or in which a thesis is considered, complete anonymity is difficult to secure ; we have recommended that *viva-voce* examinations and practical examinations should be used as widely as possible.

Secrecy of examination-papers.

144. The attention of the public was directed to this question by the fact that twice in 1917 the examination papers for the matriculation examination of the University of Calcutta leaked out and that the examination was in consequence postponed for a period of four months, causing a grievous waste of time and money for the 16,000 candidates involved. The University finally asked for the assistance of Government, and the printing arrangements and distribution of papers were managed with success by Mr. E. E. Biss of the Indian Educational Service.

145. Previously all examination-papers for the larger examinations of the University of Calcutta had been printed in England

¹Question 10.

and sent out to India. In 1917 the matriculation papers were printed in Calcutta owing to the war. The practice of having the examination-papers printed in England has been followed by several other Indian universities, though not by all. In one university, at least, they are printed in India, but the only person to whom the name of the printer and the place where the printing is done are known is the Registrar. A general opinion has been expressed to us that it is only in exceptional circumstances that trust can be placed in printing presses in India in respect of confidential work. When the number of candidates is very large, the chance of an unscrupulous candidate offering a bribe to the printer or his employés is increased. But the singular feature of the leakages at Calcutta is that the papers were made public in the press before the date of the examination ; and this seems to preclude the idea that secrecy was violated with the intention of giving an advantage to any particular candidates. The hypothesis that any candidate or candidates might have wished to delay the whole examinations in their own interests, though conceivable, seems too far-fetched to be admissible.

146. The University itself held separate enquiries into the two leakages without being able to discover their origin. The committees in charge of the enquiries had evidence placed before them in confidence, which has therefore not been communicated to us. We did not consider it as part of our reference to conduct fresh enquiries into this matter. Such enquiries would necessarily have consumed a great amount of time ; they could not, in our judgment, have been conducted usefully without the power to compel witnesses to appear and to give evidence on oath ; and we were not constituted as a body for this purpose.

147. It is rather our function to consider what reasonable precautions should be taken to prevent leakages in future. In Chapter XXVII, paragraph 44, we point out the necessity for the better isolation of the university office and its correspondence from access by the students and the general public ; but in saying this, we do not wish to imply that the leakages took place through the deficiency of the present office arrangements. We think the possibility of multiplying examination papers by lithography, formerly in use at the University of London, or by photo-lithographic processes, now available in India, deserves consideration.

Examinations as a cause of ill-health.

148. Many witnesses are of opinion that examinations seriously deteriorate the health of the students. The Rev. W. H. G. Holmes, of the Oxford Mission, who has a wide experience of Calcutta students, writes as follows¹ :—

“Addressing the Calcutta Medical Club, the late Dr. I. M. Mullick, whose practice was largely among students, said ‘The majority are melancholic, pessimistic, never enjoy life properly, both from actual want in many ways as well as from imaginary evils.’ He goes on to say ‘they get fatigued by the least bodily exertion, but what indefatigable workers they are in mental work! It is near the last few days of examination that they become unsteady both in body and mind, probably owing to excessive anxiety over an uncertain, cruel and irrational examination.’ Again, he says, ‘The reckless waste of energy of our boys during the period of arduous and elaborate theoretical examinations is the cause of their exhausted and effortless prostration in the field of life’s work, and their bad health, early break down and death. This fact is little known outside their circle.’”

Dr. Bimal Chandra Ghosh,¹ who teaches at the Calcutta Medical College, Belgachia Medical College, and the University, attributes the overstrain of the students in part to examinations. Dr. Abdurrahman¹ and many other witnesses² share the same view. Dr. P. Neogi³ writes :—

“Judging from the large amount of mental and physical exhaustion produced by the examinations it is not surprising to find that the great majority of the best students emerge from it as so many physical wrecks.”

Dr. J. Henry Gray¹ writes :—

“I believe that the importance placed upon the passing of the final examination, and the fear of failure, results in placing an undue physical and mental strain on students not exceptionally robust.”

Mr. Mohini Mohan Bhattacharjee, Lecturer in the University of Calcutta, who takes a different view, discusses the question in some detail.¹ In his opinion, the university courses are not too difficult for an average student, nor does he think that unusually hard labour is necessary to cope with them. He regards the mental strain of examinations as due to the fact that the students are not trained to regular, systematic, and intelligent work in their home-life; that there are no tutors to look after them outside the class-room, so that their difficulties go on accumulating until they seem formidable; and that students try to remove them with one heroic effort just before the examination.

¹ Question 18.

² Mainly in answer to Question 18.

³ Question 10.

149. The Government of India have furnished us with copies of a circular addressed to local Governments, no. 1043, dated 7th December 1917, enquiring "whether there is any ground for the assertion that the system whereby students are examined in all subjects of their course at once is responsible for deterioration in their health and to what extent such deterioration, if existent, may be traced not only to this system of examination, but to inadequate tuition, faulty methods of work, unhealthy surroundings and other causes." We have further received the replies to this enquiry from Assam, Bihar and Orissa, Burma, the Central Provinces, Coorg, Delhi, Madras, the North-West Frontier Province and the Punjab. (The replies received by us from Bombay and the United Provinces were only of a preliminary character.) The replies as a whole show that the opinions in other provinces on the points raised exhibit the same varieties and divergencies as those of our own witnesses. There is a fairly general consensus of opinion that under existing conditions students tend to damage their health by overwork in the period immediately preceding the examinations; and the principal of one college states that while the health of the students for the greater part of the year is on the whole very good, just before the examination the minds of some students are overtaxed to the point even of slight derangement. There is no consensus of opinion that examination by compartments would in itself relieve this state of affairs. The evidence tends to show that in other provinces as in Bengal the excessive strain before the examination corresponds to negligence at an earlier period, and that wise tutorial guidance throughout the year would improve matters. This is not the place to discuss the general question of the health of students; but it may be added that many of the persons referred to in the replies regard such ill-health as exists among students as due to causes other than pressure of examinations.

150. We have pointed out elsewhere¹ the present physical disabilities of a large number of Bengali students. We have no doubt that in certain cases, possibly in many cases, those disabilities are exaggerated by the examination-system and by the absence of tutorial guidance, on which we have laid great stress.² Special investigation would be necessary to determine how far the strain,

¹ See Chapter XIX, para. 64 *et seq.*

² Chapter XIII, paras. 63-66.

direct and indirect, of examination is responsible for the illness of students and how far this evil is remediable by changes in the examination-system. We trust that the Examinations Board, of which we are recommending the establishment in Part II of this report, and the Board of Students' Welfare will carry out a joint enquiry on this point.

Test-examinations.

151. The authorities of an affiliated college under the present regulations are bound to certify that, in their judgment, candidates permitted to enter from the college have a reasonable chance of passing the examination for which they enter. Under the terms of this regulation the colleges hold test-examinations and as a rule do not permit students to enter for a university examination unless they pass the corresponding test-examination. The same procedure is generally adopted in the case of candidates for the matriculation examination by the authorities of schools who are required to certify that the candidate has 'satisfactorily passed periodical school examinations and other tests.' A number of witnesses have protested against the holding of these test-examinations. Thus the Rev. W. H. G. Holmes writes:—

"All colleges think themselves bound to hold a *test* examination, which is as far as possible a foreshadowing of the university examination. The students go through almost exactly the same strain of cramming for this examination, sitting up late at night and learning answers to questions, as they do for the university examination, not only because they are not allowed to sit for the university examination unless they pass it, but because the passing of it is by itself regarded as an academic distinction. To be a 'failed B. A.' and to advertise this as a qualification means that the college test examination has been passed. The addition of this strain to the strain of preparation for the university examination heightens the concentration of students on examinations as ends in themselves."¹

Mr. Charu Chandra Biswas,² Mr. Haridas Bhattacharyya³ and Dr. Bimal Chandra Ghosh¹ also object to these examinations. Ordinary terminal examinations naturally form part of the work of any college, and if the college teaching is carried on in the way that we shall suggest the tutors of the students will have a record of their work, which, taken in addition to the results of the termi-

¹ Question 9.

² Question 10.

³ Questions 5 and 10.

nal examinations, should give all the evidence to the college authorities that is required to justify them either in giving or in withholding a certificate of satisfactory attendance and diligence. We are fully of opinion that the colleges should realise their responsibility in this matter; but we do not think that the present system of test-examinations is the best way of fulfilling this responsibility.

The length of examinations.

152. A number of witnesses have drawn our attention to the strain imposed on candidates by having two papers in one day.¹ On the other hand, another witness has pointed out that the B. A. and B. Sc. examinations extend over four or five weeks and regards the suspense as detrimental to the health of the candidates. The two suggestions point in contrary directions. If only a single paper were set each day the total duration of the examinations would be doubled. In cases where candidates are allowed a large number of options, the total period over which the examination extends must necessarily be a long one. The question of fatigue, to which Dr. Abdurrahman draws special attention, is one seriously to be considered. Especially in higher examinations and in subjects like mathematics, demanding extreme concentration, it might be more to the interest of the candidates to have only one paper a day or else to have an interval of a few days' rest in the middle of the examination rather than to compress it into the minimum number of days. Some witnesses suggest that the examination periods, and especially periods of four hours, are too long. Certain of the witnesses named also suggest that examinations should not be held in the hot season.

Wastage at examinations.

153. Mr. Bipin Behari Gupta,² Professor of History in the Ripon College, draws attention to the serious wastage at university examinations. Referring probably to the year 1917, and using rough figures, he points out that out of 17,000³ candidates for matriculation about 12,000 passed; that of these about 6,000

¹ Dr. Abdurrahman, Mr. Ravaneswar Banerjee, Mr. Haridas Bhattacharyya, Mr. Chintu Hiran Chakravarti, Mr. Bimal Chandra Ghosh and Mr. Amrita Lal Gupta, in answer to Question 10.

² Question 1.

³ There were only 16,000 in that year.

will stop at the intermediate stage; that of the other 6,000 only about half will take the B.A. or B.Sc. degrees; and that only about 300 will obtain the M.A. or M.Sc. degrees.

Reduction of interval between conclusion of course and commencement of the corresponding examination.

154. Mr. Khudi Ram Bose, Principal of the Central College, Calcutta,¹ has drawn our attention to a serious defect in university and college organisation. He points out that unsuccessful candidates for the I.A., I.Sc., B.A., and B.Sc. examinations have barely four and a half months' work between their re-entry at a college in July and the termination of their course in December. There is an interval of about two months between the termination of the course and the holding of the examination in March. Mr. Bose suggests that the university authorities should enforce the prolongation of the college session to within a fortnight before the commencement of the university examination; he also suggests, with the same end in view, that the colleges should dispense with the test-examination, a subject with which we have dealt in paragraph 151 above. Mr. Hem Chandra Das Gupta makes a similar suggestion.² The criticisms of Mr. Bose and Mr. Das Gupta seem amply justified. The change proposed might however seem to involve insufficient notice to the University of the number of candidates for which it has to provide; but this objection might be met without great difficulty. The college might be required to send in a provisional list of entries from its students with their fees, say two months before the examination, and the final list of attendances say three weeks before the examination, having the power to cancel the candidature of any student who had not satisfied the university regulations in regard to this matter.

Interval between conclusion of examination and publication of results.³

155. At the present moment, the University gives no previous notice of the date at which examination results are to be published. Mr. Gopal Chandra Maitra, Principal of the Victoria College, Narail,² complains that the period between the conclusion of certain

¹ Question 9.

² Question 10.

³ Chapter XXXIX, para. 33, *ad fin.*

examinations and the publication of the results is very long. It is impossible to lay down a rule in this matter, as undue haste leads necessarily to unsatisfactory correction of the examination papers. But there is no reason why the University should not announce beforehand the latest date by which the results will be issued for each examination, basing its calculations on previous experience. Any unexpected excess in the number of candidates could be met by the appointment of additional assistant examiners.

Text-books for examinations.

156. A number of our correspondents deal with the question of text-books. Mr. Bejoy Kumar Sarkar, Lecturer in Economics in Calcutta University, writes as follows:—

“ Undue prominence should not be given to text-books as at present. The number of text-books should be reduced. In fact, not more than one comprehensive text-book is required in many cases. There should be suggested a reading of appropriate topics from other books. This is essentially necessary. Even those who want really to study and think for themselves over particular questions find it difficult to do so for fear that they may spend too much time on a particular book and fail, for want of time, to read the other books.”¹

Another aspect of the text-book question is referred to in the evidence of the Rev. W. E. S. Holland quoted in paragraph 168 below. We may point out that in certain subjects more than one text-book is necessary; and that it is desirable in other cases, that a student should be referred to several text-books so that he may not regard any one book as verbally inspired.

157. In a residential university, such as we propose at Dacca, and in the colleges of a reconstituted University of Calcutta, it may prove to be unnecessary to prescribe text-books, as the students will work under the guidance of their teachers and the teachers will advise them from time to time as to the text-books to be used. Possibly for the mufassal colleges the prescription of a text-book may still be regarded as a necessary evil; but it should be clearly understood that examiners would not necessarily be restricted to the subject matter of any such book. We shall, in Chapter XL, make further recommendations in regard to this matter.

¹ Question 10.

Use of lectures by students as a means of preparation for examination.

158. We have had evidence of a somewhat divergent character in regard to the use of lectures by students for the purposes of examinations. It is clear that at any rate in the first two years a large number of students are unable to follow the substance of the lectures and to take notes. Mr. Turner of Dacca¹ points out that to such students the work is practically useless ; and he adds—

“ it is not surprising that students on the whole regard lectures as a handicap prescribed by the University and turn to the text-books, in which are to be found notes not inferior to those dictated in class and much more accurately written, as the best method of getting through their examinations.”

159. On the other hand the evidence quoted in paragraphs 16—24 above shows that many students regard their lectures as an effective means of assisting them in their examination work and that they are keenly anxious that the scope of the lectures should be restricted to that work. It is possible that the lectures regarded as superfluous by the majority of students under the present system are those in which the lecturer declines to follow their wishes in this matter.

VI.—Methods suggested for diminishing the rigidity of the examination system.

160. We have in earlier sections drawn attention to various ill effects of the rigidity of the examination system.

Under Section (ii) of Question 9, our witnesses were asked to express their views in reply to the following queries :—

“ Whether an attempt should be made to reduce the rigidity of the examination system and, if so, whether you consider that the use made of examinations might be varied to meet the needs of different subjects of study and of different groups of students in one or more of the following ways—

- (a) the teaching might for certain purposes be defined, as at present, by prescribed examination requirements,
- (b) the teacher might be left with a maximum of freedom and the examinations be adjusted to the courses given by individual teachers,
- (c) in some particular subjects or sections of a subject, though teaching might be given, there might be no test by a formal university examination.”

161. It is clear from the replies to Question 9 as a whole that while a large number of witnesses would be glad to reduce the rigidity of the examination system others fear lest any relaxation

¹ Question 1.

of the present system might mean a lowering of the standards of examination ; and many of those who would wish to see the examination system made less rigid are unable to suggest any means by which this should be effected. Doubts are expressed by a number of witnesses as to whether the majority of the present lecturers are of sufficient calibre to be entrusted with the freedom to frame their courses suggested in part (b) of the question;¹ and many witnesses would restrict such freedom to teachers for the higher examinations.

162. It is of course clear that in the lower examinations the field of knowledge to be covered is much more restricted than in the higher, and that there is a greater consensus of opinion as to the essential elements in that field ; but even in such a subject as pass mathematics or pass English for the bachelor's examinations, there is room for the introduction of new methods which should not be excluded by the rigid use of a prescribed syllabus. In these parts of the curriculum difference between teachers will be differences of method rather than of range.

163. In a teaching university, like the future University of Dacca, the excessive rigidity of the examination system now prevailing in Calcutta would disappear naturally, since the number of teachers would be relatively small, and they would be responsible both for the syllabuses (which could be altered without much difficulty to respond to new needs and new ideas), and also very largely for the actual conduct of examinations. The difficulties in the Teaching University of Calcutta, as well as in the mufassal organisation, owing to their greater complexity, would necessarily be greater, but we think they would be manageable and that they would diminish in course of time.² Our general proposals in regard to secondary and higher secondary education and to the constitution of the University of Calcutta will very materially reduce the rigidity of the system and make it more responsive to new ideas, while the whole standard of attainment required should be materially raised by the direction of the energies of students into more fruitful channels than that of stark memorisation.

¹ For example, by Sir R. G. Bhandarkar, Mr. Wahed Hossain, Mr. Justice Abdur Rahim.

² Chapters XXXI, paras. 15-16, XXXV, paras. 45-51 and XXXVII, paras. 76-82.

164. The response¹ to the suggestion that teaching might be given in particular subjects or sections of a subject without being tested by a formal university examination, is perhaps warmer than might have been expected under existing circumstances. Dr. Pramathanath Banerjea regards it as a very welcome innovation. Mr. Jaygopal Banerjee thinks it deserves consideration and trial; Sir Rash Behary Ghose, Dr. Adityanath Mukerjee and Mr. Adhar Chandra Mukerjee think that examinations might be dispensed with in collateral or subordinate subjects. Mr. A. C. Chatterjee regards the suggestion as possible and desirable in some subjects, and also generally in the highest courses of study. Mr. Surendra Mohan Ganguli thinks the plan would encourage 'free and agreeable reading.' Dr. Brajendranath Seal welcomes the proposal for various branches of higher work. A number of witnesses,² as indicated in paragraph 110 above, think that the University should dispense with practical examinations and that practical work should be treated in general under this rubric, a view we are unable to share.

165. If some of our witnesses welcome the suggestion made in Question 9 (ii) (c), namely, that teaching should be provided which would not be tested by a formal university examination, many influential witnesses regard the suggestion as impracticable, at any rate, at present. Thus Mr. J. R. Barrow, Officiating Principal of Presidency College,¹ says—

"I believe (and I am supported by the staff of the Presidency College, Calcutta,) that hardly any one would take up any course if he had not the prospect of passing an examination at the end of it."

Mr. Benoy Kumar Sen,¹ also of the Presidency College, thinks that without the pressure of an examination the students could not be made to pay sufficient attention to the subject and that all the labour spent on it would be simply wasted. Mr. W. C. Wordsworth, Director of Public Instruction,¹ and Mr. J. W. Gunn, Assistant Director,¹ emphatically support the same view.

Sister Mary Victoria¹ thinks the colleges are not yet ready for the change proposed. Mr. Justice Abdur Rahim¹ says, "I could not support (a) (b) or (c) unless the present level of teachers is considerably raised." Mr. F. W. Südmersen, Principal of Cotton College,¹ thinks it only practicable under very careful safeguards

¹ Question 9.

² E.g., Rai Kumudini Kanta Banerjee Bahadur, Mr. N. N. Dey, Mr. Umes Chandra Haldar,

and for post-graduate and honours work. Mr. H. Sharp¹ is strongly in favour of the suggestion, but thinks public confidence in the teachers is not yet sufficiently established to render it acceptable except in a very limited degree.

166. Dr. Seal¹ points out that the framers of the new regulations for matriculation had in mind the distinction between subjects for teaching and subjects for examination when they omitted English history from the matriculation curriculum and made geography and Indian history optional. He thinks that the result in the schools has been disastrous. Sir P. S. Sivaswamy Aiyer of Madras¹ thinks students entirely neglect those subjects in which there is no public examination and that head masters do not possess the firmness of decision required to refuse promotion to such students. Mr. J. W. Gunn¹ thinks that the practice would (in schools) "merely extend the evil already prevalent in schools, namely, the general neglect of all non-examinational subjects." Our Madras witnesses,¹ Sir P. S. Sivaswamy Aiyer (just quoted), Miss Eleanor McDougall, and Mr. Mark Hunter strongly support that view. Shams-ul-Ulama Abu Nasr Waheed¹ thinks the suggestion only practicable in a centralised university of the teaching and residential type.

167. Some of our correspondents appear to have had in mind regulations making compulsory attendance at certain courses on subjects on which no examination was held. We are inclined to agree that, with the present temper of the average Bengali student, lecturers giving a course of this kind would be likely to have, under present conditions, a number of unsympathetic auditors. But we are not convinced that such regulations might not work in the interest of the best students, who would have the range of their knowledge and interests increased, without having an excessive examination strain put on them; while the less intelligent and keen students, if they failed to pay attention, would at any rate suffer no injury. There is in many ways a tendency in public opinion and in academic opinion to sacrifice the interests of the best to the supposed interests of the average student, a very doubtful policy when the future of a country as a whole is concerned.² We should like in any case

¹ Question 9.

² Chapter XIII, paras. 57-63.

to see university courses opened on a number of subjects, connected with the prescribed subjects of the curriculum, as a privilege to students, who would be free to attend or not. With the relaxation of examination pressure in the direction of memory-tests and the increase of pressure in the direction of intelligence-tests the better students would probably find it conducive to their interests as well as to their intellectual satisfaction to attend such courses. The historian would, as suggested by Mr. Gauranganath Banerjee,¹ find a course in the history of fine art, that much neglected subject, conducive to his study of history ; a chemist might go for pleasure and profit to a course on recent advances in electricity, or, to a course on some special branch of chemistry, not falling within the examination syllabus ; the philosopher might well desire to attend a course on experimental psychology and so on. Mr. D. B. Meek, in answer to Question 5, writes that in his university (Glasgow), many students took extra subjects because they were interested in them and also because they wished to come under the influence of the professors in those subjects, although they had no intention of presenting them at their degree examinations. He contrasts this state of things with that in Calcutta in which no student, within his knowledge, has ever taken more than the minimum number of subjects. In no university colleges in the world of which we are aware, except other Indian colleges, are the courses so limited. Our returns show that with exceptions that may be regarded as negligible, the courses in the colleges of the University of Calcutta are entirely and absolutely limited to courses preparing for examinations. The technical schools in many countries show a more disinterested curriculum and more disinterested auditors. We do not believe that this unhealthy condition of affairs, entirely unworthy of Bengal, can continue. So long as it does, it will be a clear proof that the true university spirit does not exist in any large measure in the province.

Selection of subjects.

168. In one matter, according to some able and experienced witnesses, the present regulations, instead of being over-rigid, give to the students a latitude which is contrary to their own interests. They have drawn our attention to the fact that students take advantage of the regulations to select subjects

¹ Question 9.

from the lists of options that are not in any way correlated, in the hope of getting through their examinations easily.¹ Dr. Nares Chandra Sen Gupta under the heading 'Defects in Methods in the University' writes :—

"Want of proper co-ordination of subjects is the first thing that strikes one. A man goes on reading physics without having gone through a course in mathematics. He reads philosophy without knowing the elements of science without which much of modern philosophical works would be unintelligible to him. One reads Roman law without knowing Roman history and so on Most amazing combinations of subjects are offered by candidates for the different examinations. This should never be permitted."

"Students," says Mr. Holland, "determine their choice of course not by interest in any particular subject, but by the length of text-book prescribed. For this reason logic and chemistry are popular subjects, history the reverse. A student will say :— There are three long text-books in history, and only one, so thick, in botany."²

169. There are, doubtless, great advantages in providing a wide selection of courses to suit the varying capacities and future careers of individual students. On the other hand, it is clear from the evidence that the selection made by students is not usually made with reference to their own tastes, or to the requirements of their future careers, but merely with a view to passing an examination easily. We hope the students will receive more guidance in future and agree entirely with Dr. N. C. Sen Gupta that the courses should be co-ordinated and that the choice of students should be limited to such co-ordinated courses. It is further to be pointed out that such co-ordination will greatly reduce the difficulties of colleges in arranging their time-table.

VII.—Non-collegiate students.

170. Section 19 of the University Act of 1904 reads as follows :—

"Save on the recommendation of the Syndicate, by special order of the Senate, and subject to any regulations made in this behalf, no person shall be admitted as a candidate at any university examination other than an examination for matriculation, unless he produces a certificate from a college affiliated to the University, to the effect that he has completed the course of instruction prescribed by regulation."

Chapter XVI of the Calcutta University regulations (of which a copy is printed in the volume of appendices to this report) comprises the regulations made under the section of the Act quoted above.

¹ Mainly in answers to Question 1.

² Question 1, —

171. Under Section 3 of Chapter XVII of the university regulations female candidates are admitted to the intermediate examination in arts and science and to the B. A. examination without having studied in an affiliated college ; but the following regulation, Chapter XVI, No. 4, applies to female students as well as to male non-collegiate students :—

“ Before a candidate is permitted to present himself in any science subject for which a practical course is necessary under the regulations, he shall produce a certificate from the principal of an affiliated college or some other authority approved by the Syndicate to the effect that he has taken such a course in his laboratory.”

172. The table on page 220 furnished by the Calcutta University shows the number of non-collegiate students admitted during the past five years.

173. It will be seen that the number of students classed as non-collegiate students is considerable. But we understand that it would be a mistake to suppose that they include more than an insignificant number of students preparing themselves for examination by private study. Many of them are students of colleges who have failed to make up the full tale of attendances required by the University ; and most of the remainder are teachers. The regulations relating to teachers are as follows :—

Chapter XVI.

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“ 5. Employment as a teacher shall not be regarded as a ground of recommendation [for admission as a non-collegiate student] unless the applicant has been employed for at least three years preceding the examination in the exercise of his profession in, (1) a college affiliated to the University, or (2) a school recognised by the University as competent to send up candidates for the matriculation examination, or (3) any other school approved for the present purpose by the Syndicate.

6. Laboratory assistants and demonstrators and librarians of affiliated colleges shall be treated as teachers.”

It will be seen that these regulations do not in terms confer any prescriptive right on teachers to be admitted as non-collegiate students, but on the contrary limit the conditions applicable to teachers.

174. We have already expressed in paragraphs 97—100 above our view that students who have failed ought not, as a rule, to be required to repeat the whole of their course of study. We understand that the great majority of non-collegiate students come at present within this category, which would almost disappear

Statement showing the number of private students admitted to various examinations of the Calcutta University during the last 5 years.

Examination.	1913.		1914.		1915.		1916.		1917.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Matriculation Examination { Private Teachers	316	6	481	17	406	10	504	22	648	34
	38	2	93	...	71	...	101	1	114	1
Intermediate Examination in Arts*	263	20	598	18	380	26	371	28	233	34
Intermediate Examination in Science*	22	...	48	...	20	...	24	...	31	...
B. A. Examination*	80	8	158	5	187	8	162	16	180	9
B. Sc. Examination*	9	...	13	...	17	1	6	1	54	...
M. A. Examination*	43	...	27	1	48	...	78	...	117	...
M. Sc. Examination*	4	...	0	...	18	...	41	...	36	...
L. T. Examination*	...	1	...	...	1	...	...	...	...	...
B. T. Examination*	...	1	1	2	1	...	3	...	4	...
B. L. Examination*	...	...	18	...	10	...	0	...	...	...

* In examinations other than matriculation candidates appearing as non-collegiate students are not separately classified as (1) private students and (2) teachers.

(except for female students) if the changes we recommend were adopted.

175. But some of our correspondents would extend the category of non-collegiate students to the widest possible limits. Thus, in answer to Question 1, Mr. Ramananda Chatterjee writes as follows :—

" For poor students and others, examinations should be held for the conferring of external degrees, as in London. I do not ignore all that can be said against such degrees. Nevertheless I consider them essentially necessary in the present educational and pecuniary circumstances of my countrymen. The widest *spread* of the highest knowledge is at present at least as important for the people of India as the giving of the highest ideal training to a fraction of our students. Any such spread of knowledge to an adequate extent can, for some time to come, be brought about only by some such incentive as the conferring of external degrees. . . .

If both Government and the people be fully alive to the vital and indispensable need of education, both the spread and the improvement of education can be secured."

Similar suggestions are put forward by Mr. Siti Kantha Vachaspati and Mr. G. C. Bose (who would have all attendance at lectures voluntary) in answer to Question 10 and by Mr. E. E. Biss in answer to Question 5. — Mr. Biss's argument is largely based on the present unsatisfactory condition of the residence of students in towns situated far from the restraining influences of their own homes. We have dealt with this important matter elsewhere,¹ and trust that if our recommendations are adopted the evil to which Mr. Biss refers will be greatly lessened.

176. We are in the fullest sympathy with Mr. Ramananda Chatterjee in his desire that education should be spread throughout the length and breadth of the land and that private study as well as university study should be encouraged, especially for the advantage of those whose intellectual interests have awokened at a relatively late age. Moreover, looking at the question from a more material point of view, we quite understand that it may be to the benefit of a young man who has entered (say) a merchant's office or Government service to show to his employers not only that he has intellectual interests, but that he has been successful in pursuing them by obtaining university recognition of his attainments.

177. We believe that certain studies may be pursued successfully by students alone, or with the assistance of correspondence

¹ See Chapters XIX and XXXIX.

classes, especially such subjects as the written knowledge of languages or a knowledge of mathematics;¹ and we should see no objection to the award by the University of diplomas to private students in such subjects, on the strength of examination tests, but on the clear understanding that the University holds itself responsible only for the certification of the tests and not for the previous training of such students.

178. But it will be an evil day for Bengal if ever university degrees, which ought to guarantee the training as well as the passing of an examination test, are granted to all comers. The present moment is in our judgment critical, and if the retrograde step is taken of increasing vested interests in the present examination and teaching systems it may possibly prove fatal to the changes necessary to put them on a sound basis throughout Bengal. The probability of any considerable number of students in Bengal being able to pursue a complete course of university study in their own homes seems to us extremely small, though isolated students may well study isolated subjects privately, and we should wish to see such study encouraged. What we anticipate is that a purely external system of degrees would lead to the creation of a host of unlicensed and uncontrolled colleges in which the conditions, both social and educational, would probably be worse than in any of the existing colleges, and the result would thus be not the spread, but the deterioration, of higher education in Bengal.

179. The poor but able students of Bengal deserve every consideration. We are strongly in favour of assisting them by means of scholarships to the means of obtaining a university training. It would be against their interests to lead them, by the conferment of degrees on the results of purely external examinations, to think that they can get by home-study the advantages of real university education, such as we hope will be afforded in the future by the universities of the Presidency.

VIII.—Concluding observations.

180. It is sometimes alleged as a reason for maintaining the supremacy of examinations in every department of education that they test 'character.' It may be well therefore briefly to examine this statement. It undoubtedly contains an element of truth.

¹ See para. 55 and footnot^e.

We shall find that those who make it mean that a successful examination candidate must have had the necessary self-restraint, pertinacity of purpose, and industry, not to neglect his work for pleasure, besides the power of judgment required not to over-work. He must also have sufficient nerve not to lose his head during the actual period of the examination. These are valuable qualities. But it may be pointed out that while it is true that the majority of students who pass possess these qualities in a greater degree than the majority of those who fail, success in an examination obviously depends on intellectual ability as well as on them; it is a function of several variables. The more brilliant a candidate and the more retentive his memory, the less evidence does examination success afford as to any side of his character; and it would be unwise to assume that every candidate who passes an examination has either much industry or much self-restraint. An examination, if properly conducted, gives direct and unquestionable evidence of the proficiency of each candidate; but (without inviting information of a different kind) very little, if any, as to the way in which that proficiency has been acquired through the exercise of his moral powers. Moreover the elements of character are far from being limited to those required for passing examinations. Examinations give no direct evidence of such valuable qualities as honesty, truthfulness, or the power of being a leader of men. We must therefore be on our guard when examinations are put forward as a test of character; and especially when it is sought to minimise the defects of a particular examination system by exaggerating its virtues in this direction.

181. We desire to add one final word in regard to the value which should in our judgment be attached to examination certificates and degrees. We regard them as passports to careers, for which the university certifies the suitability of the holders. But those passports should not be regarded as valid for a life-time. Ten years or so after a man has taken his degree (especially if this has been awarded, like the majority of degrees, on the result of performance in an examination room, and not on the result of his own original investigation), he ought to have done his work in the world in such a way that he is judged by that, and not by his examination answers, or even by a more complete record of his early youth. Conversely, it should be no reproach to a man

that he has done badly in an examination, if by his subsequent work he has retrieved an early failure, which may, in some cases, have been due to illness or misfortune. We think it absurd that a man who has obtained only a low honours degree should be debarred from preferment for all time when by personal achievement in original work, in administration, or in teaching, he has shown himself capable of beating his early competitors in the real work of life. Examination results may show capacity and promise. But it is by a man's performance, in which character counts so largely, that he ought finally to be judged, in the university as elsewhere.

182. From its foundation in 1857 down to the reform of 1904, the University of Calcutta, like all other Indian universities, was an examination-board and had no functions other than of examining candidates and of inspecting and licensing the institutions at which they were taught.

183. It would be idle to deny that by its examinations the University of Calcutta has rendered great services to Bengal and to the other provinces, from the Punjab to Burma, which it has served in the past. The examination system has served to distinguish, roughly speaking, the industrious from the indolent, the more gifted from the less gifted, those capable of learning a foreign tongue from the incapable. But in the hands of the University that system has developed into a vast machine of which those who operate it have become the slaves rather than the masters; a machine turning out much that is of inferior quality, and gravely damaging intellectually and physically some of the best human material with which it deals. It is a significant fact, as one of our Indian witnesses has pointed out, that the intellectual out-put of the University of Calcutta in the form of contributions to learning has been small relatively to the size of the University, a testimony to the unfruitfulness of the education which the University has encouraged and developed under the all-powerful influence of regulations for examinations.

184. It is impossible to peruse the evidence on the examination system as it exists to-day in Bengal without a feeling of profound sadness. The immensity of the effort, disproportionate to the results; the painful anxiety of the candidates; the mechanical award of marks encouraging the least fruitful efforts of the mind;

a leniency sometimes neglecting the grave responsibility of the University to the public and tending to class the less with the more deserving students ; the number of failures in spite of that leniency ; the sterilising influence of the whole system on both teachers and taught, and the consequent crying waste of the intelligence of the youth of Bengal : these are evils which have been brought home to us by the most convincing evidence from witnesses of every section of the community, as well as by what we ourselves have seen. These evils can only be eradicated by resolute and determined reform, accompanied by a change in the whole spirit in which the university institutions of Bengal shall be administered in future.

CHAPTER XVIII.

THE MEDIUM OF INSTRUCTION AND EXAMINATION; AND THE TEACHING OF ENGLISH AND THE MOTHER TONGUE.¹

I.—*Introduction.*

1. We are concerned only with the question of the medium of instruction and examination in those secondary schools which prepare students for higher education and with the medium in institutions for higher education. The question of the medium of primary schools, in which all teaching is given in the vernacular,

¹ Except where otherwise stated, the references to the evidence in this chapter relate to the answers to Question 11 of which the text may be conveniently quoted here:—

- (i) Do you hold that English should be used as the medium of instruction and of examination at every stage above the matriculation in the university course?
- (ii) (a) If your answer to (i) is in the affirmative, do you consider that university students have on their entrance to the University an adequate command of English?
- (b) To what extent do you think that English should be used as the medium of instruction in secondary schools for those students who are being prepared for the matriculation?
- (c) Are you satisfied with the kind of training now given in English before entrance to the University? If not, what improvements do you suggest?
- (d) Would you draw a distinction, both in school and university, between practical training in the use of the English language and training in the study of English literature?
- (e) Do you think that the matriculation examination in all subjects should be conducted in English?
- (f) Do you think that English should be taught to all students during their university course and, if so, what kind of teaching would you advocate for those students whose general course of study may be other than linguistic?
- (iii) If your answer to (i) is in the negative (*i.e.*, if you think that English should not be used as the medium of instruction and of examination at every stage in the university course above the matriculation), what changes would you recommend, and at what stages in the university and pre-university courses?

A certain number of witnesses have dealt with the question of English in reply to Question 1. Sir P. S. Sivaswamy Aiyer of Madras speaks of "the crushing intellectual burden of having to acquire knowledge through the medium of a foreign language, especially in the high school course." Dr. Pramathanath Banerjea, University Lecturer in Economics, thinks the use of the English medium involves great waste of time and energy, and leads boys to attach importance to words rather than thoughts; and Mr. Suniti Kumar Chatterjee and Mr. N. N. Dey write on similar lines.

and of middle schools, vernacular and Anglo-vernacular,¹ lies outside our reference and will be only referred to incidentally.

2. The main facts of the situation broadly stated, as it exists to-day in Bengal, are that in the high English schools from Class VII (of which the nominal age is 12-13) to Class X¹ or the matriculation class, inclusive, the medium of instruction is supposed to be English, though many teachers use the vernacular largely, even in the highest class;² that the matriculation examination is almost exclusively conducted in English;³ that university teaching, even the teaching of Sanskrit, is mainly conducted in English, though some teachers occasionally give explanations in Bengali; and that under the regulations of the University English is at present the sole medium of examination for all examinations above the matriculation except the M. A. examination in classical languages, in which certain questions are set and required to be answered in those languages. Thus in university education, English is used almost entirely to the exclusion of the vernacular.

How did this situation arise?

II.—Historical.

3. The first suggestion that English should be used as the medium of instruction for Indians appears to have been contained in the treatise of Mr. Charles Grant submitted to the Court of Directors of the East India Company in 1797.⁴ Mr. Grant thought English would be the most effectual medium for the enlightenment of India. But his treatise was seen by few till it was issued in a Blue Book in 1832, and the Company took no action in regard to it; nor did they take any action for the encouragement of vernacular education. Their first efforts towards encouraging education in India were limited to the encouragement of the classical languages, Sanskrit and Arabic, and subjects taught through the medium

¹ This is the nomenclature used in Eastern Bengal and (by chance, no doubt) by the majority of the witnesses who have mentioned specific classes. In the nomenclature of Western Bengal, the highest class is called Class I, the second, Class II, and so on. (See Chapter XXI, para. 4 for further details.)

² See paras. 81-83 below.

³ Students who present history, an optional subject, are allowed to write their answers in the vernacular.

⁴ "Observations on the state of society among the Asiatic subjects of Great Britain; and on the means of improving it." Parliamentary Papers relating to India: General Appendix I. *Public* (1832); quoted in *A History of English Education in India, 1781-1893*, by Syed Mahmood, 1895, page 3.

of these languages.¹ The movement for an 'English education' was purely non-official ; the main originators of it were Ram Mohan Roy and David Hare ; the Hindu College, opened in 1817, the first college at which English was first systematically taught was planned by these two men, and it was founded mainly by the generosity of Hindus, although it was taken over later by Government.² The other factor in the spread of English was, as we have seen, missionary effort.³

4. The Public Instruction Committee, in a report issued in 1831, say of the Hindu College (or Vidyalaya) that as a result of its establishment—

"a command of the English language and a familiarity with its literature and science have been acquired to an extent rarely equalled by any schools in Europe. A taste for English has been widely disseminated, and independent schools, conducted by young men reared in the Vidyalaya, are springing up in every direction."⁴

Sir C. Trevelyan, who was a member of the Committee, writes that the taste for English became more and more widely disseminated, that 'a loud call arose for the means of instruction in it' and that the subject was pressed on the Committee from various quarters. Meanwhile, the English classes tacked on to the Sanskrit College and other oriental colleges failed in their purpose. The oriental course was too severe to allow of secondary studies ; and a fundamental difference of opinion arose in the Committee as to the proper mode of spending the income of a lakh a year allotted by the East India Company for education.⁵ The 'Orientalists' wished to spend the money mainly on translating western works into Arabic and Sanskrit, and on paying stipends for students to attend the colleges at which learning was conveyed in these classical tongues. The 'Anglicists' wished to economise these bounties, to purchase or print only such Arabic and Sanskrit works as were needed for actual use in the colleges, and to employ the income set free "in the establishment of new seminaries for giving instruction in English

¹ Chapter III, para. 3, and Chapter IV, para. 5.

² The names of the principal donors, recorded on a tablet at the Hindu School, are H.H. the Maharajah of Burdwan, Babu Gopee Mohun Tagore, Babu Jay Kissen Singh, Rajah Gopee Mohun Deb, Babu Ganga Narain Das.

³ See Chapters III and IV.

⁴ C. E. Trevelyan, *Education of the People of India*, 1838, page. 8.

⁵ See Chapter III, para. 3.

and the vernacular languages, at the places where such institutions were most in demand."

5. As is well known, the controversy was settled by Macaulay's famous minute of 2nd February 1835,¹ written in his capacity not as a member of the Public Instruction Committee but as a member of Council, and the Resolution of Lord William Bentinck's Government of 7th March following.² In that Resolution, the Government stated that they were of opinion that "the great object of the British Government ought to be the promotion of European literature and science amongst the natives of India and that all the funds appropriated for the purposes of education would be best employed on English education alone;" that it was not the intention of Government to abolish any college or school of native learning of which the native population appeared inclined to avail themselves, but that the stipends paid to students of such institutions would be discontinued; that expenditure of the Public Instruction Committee on printing oriental works should be discontinued; and that money so saved should be "employed in imparting to the native population a knowledge of English literature and science, through the medium of the English language."

6. In regard to the vernaculars all parties were agreed. They thought that the vernaculars "contained neither the literary nor scientific information necessary for a liberal education." But this did not mean that they underestimated the importance of the vernacular. On the contrary, says Trevelyan, "it was admitted on all sides that" the instruction of the mass of the people through the medium of their own language was the ultimate object to be kept in view;³ but meanwhile "teachers had to be trained, a literature had to be created, and the co-operation of the upper and middle classes of society had to be secured." The question which divided the Public Instruction Committee was what language was the best instrument for the accomplishment of these great objects, English on the one hand, or Sanskrit and Arabic on the other. As there was no dispute about the vernacular no mention was made of it in the Resolution of 7th March, but as it was feared by many that the point had been overlooked, the Com-

¹ Reprinted in the volume of appendices to this report.

² The full text of the resolution is printed in Trevelyan's *Education of the People of India*, pages 13-14.

³ *Loc. cit.*, page 21.

7. In the same year as that of Lord William Bentinck's Resolution a great impulse was given to vernacular education, by the freedom conferred on the Press ; and in 1837 a still greater impulse by the abolition of Persian from the courts.¹

8. In regard to the schools the views of the Public Instruction Committee were approved by Government and acted on. One or more teachers of the vernacular language formed a regular part of the establishment of each English school (there were ten such teachers at Hooghly) and the instructions to local committees on this head were²—

" that the pupils should be constantly exercised in translating into their own language, as well as into English, from the time they enter the seminaries till their departure ; and that they should also practise original composition in both languages as soon as their minds have been sufficiently opened to attempt it with advantage."

Every endeavour was to be used to give the pupils the habit of writing 'with facility and elegance in their native language.'³ The object of the committee was to educate the upper and middle classes first, so that they might educate the rest of the people. They were as 'the leaders of the people' to become school-masters, translators, authors.⁴

9. Incidentally Trevelyan comments more than once on the capacity of Bengali children for learning English ; they—

" seem to have their faculties developed sooner and to be quicker and more self-possessed than English children. Even when the language of instruction is English, the English have no advantage over their native class-fellows. As far as capability of acquiring knowledge is concerned, the native mind leaves nothing to be desired. The faculty of learning languages is particularly powerful in it."⁵

Trevelyan discussed the argument of the 'Orientalists' that Sanskrit and Arabic were indispensable for the improvement of the vernaculars and rejected it on the ground that English has adopted words from the most various sources and become 'one of the most powerful, precise, and copious languages in the world ;' that the Indian vernaculars of Sanskritic origin have adopted a proportion of Persian and Arabic terms ; that Persian itself has

¹ See Report of the Bengal Provincial Committee in the Appendix to the Education Commission of 1882, page 7.

² Trevelyan, *loc. cit.*, page 25.

³ Trevelyan, *loc. cit.*, page 47.

⁴ Trevelyan, *loc. cit.*, page 40.

⁵ *Loc. cit.*, pages 111-112 and *passim*.

become saturated with Arabic, despite their difference of origin ; and he saw no reason why the Indian vernaculars should not enrich themselves from English as well as from Sanskrit.

10. Trevelyan represented the views of the Government of his day. Their policy was to develop the use of English, but no wise at the expense of the vernacular ; on the contrary the development, refinement and enrichment of the vernacular was one of their principal aims.

11. We find that aim embodied in the great Despatch of 1854. The Directors of the East India Company spoke of the high attainments in English literature and European science acquired by a certain number of Indians ; and expressed their desire and object of extending far more widely the means of acquiring general European knowledge of such a character as might be practically useful to the people of India in their different spheres of life ; they next discussed the question of the medium of instruction ; they pointed out that, owing to the deficiency of translations in either the vernaculars or the learned languages of the East, English was the only key (in India) to the knowledge of European literature ; but they added that in some parts of India, and more especially in the vicinity of the presidency towns where persons with a knowledge of English were preferred to others for many employments, a very moderate proficiency in the English language was often looked upon as the end of and object of education rather than as a necessary step to the improvement of general knowledge ; and that a tendency had been created in these districts unduly to neglect the study of the vernacular languages. Then follow two significant paragraphs which sum up the policy of the Directors in this matter and which we quote *in extenso* :—

" It is neither our aim nor desire to substitute the English language for the vernacular dialects of the country. We have always been most sensible of the importance of the use of the languages which alone are understood by the great mass of the population. These languages, and not English, have been put by us in the place of Persian in the administration of justice and in the intercourse between the officers of Government and the people. It is indispensable, therefore, that, in any general system of education, the study of them should be assiduously attended to, and any acquaintance with improved European knowledge which is to be communicated to the great mass of the people—whose circumstances prevent them from acquiring a high order of education, and who cannot be expected to overcome the difficulties of a foreign language—can only be conveyed to them through one or other of those vernacular languages.

In any general system of education, the English language should be taught where there is a demand for it; but such instruction should always be combined with a careful attention to the study of the vernacular language of the district, and with such general instruction as can be conveyed through that language; and while the English language continues to be made use of as by far the most perfect *medium* for the education of those persons who have acquired a sufficient knowledge of it to receive general instruction *through* it, the vernacular languages must be employed to teach the far larger classes who are ignorant of, or imperfectly acquainted with, English. This can only be done effectually through the instrumentality of masters and professors, who may, by themselves knowing English, and thus having full access to the latest improvements in knowledge of every kind, impart to their fellow-countrymen, through the medium of their mother tongue, the information which they have thus obtained. At the same time, and as the importance of the vernacular languages becomes more appreciated, the vernacular literatures of India will be gradually enriched by translations of European books or by the original compositions of men whose minds have been imbued with the spirit of European advancement, so that European knowledge may gradually be placed in this manner within the reach of all classes of the people. We look, therefore, to the English language and to the vernacular languages of India together as the *media* for the diffusion of European knowledge, and it is our desire to see them cultivated together in all schools in India of a sufficiently high class to maintain a school-master possessing the requisite qualifications."¹

12. Nothing could be clearer. It was the aim of the Directors not to substitute English for the vernacular in secondary schools, but, first, to cultivate a bilingual system for those pupils for whom English was regarded as necessary, and secondly, if possible, to develope in time the vernacular schools up to the level of those in which the medium was English. Meanwhile they wished there to be a passage for the cleverest boys, not only from the Anglo-vernacular but also from the vernacular schools, to those more advanced schools in which English was used as the medium of instruction. It is in reference to this proposal that they express their views in regard to the future development of the vernacular schools.

"We include," they say, "these Anglo-vernacular and vernacular schools in the same class [the class of schools for which scholarships to higher schools should be provided] because we are unwilling to maintain the broad line of separation which at present exists between schools in which the *media* for imparting instruction differ. The knowledge conveyed is, no doubt, at the present time, much higher in the Anglo-vernacular than in the vernacular schools, but the difference will become less marked, and the latter more efficient as the gradual enrichment of the vernacular languages in works of education

¹ Despatch from the Court of Directors of the East India Company to the Governor-General of India on the education of the people of India (10th July 1851), paras. 13 and 14.

allows their schemes of study to be enlarged, and as a more numerous class of school-masters is raised up, able to impart a superior education."¹

13. With the creation of universities in 1857, the question entered on a new phase, unforeseen by the authors of the Despatch. It was on their recommendation that the universities were founded; it was their view, a view incontestable at the time, that the highest education of a modern character could only be given in India through the medium of English; and it was their view that Government should choose its Indian officers, mainly, at any rate, from among those highly educated young men who had won degrees and other university distinctions, though they expressly say that what they desire "is that where the other qualifications of the candidates for appointments under Government are equal, a person who has received a good education, irrespective of the place or manner in which it may have been acquired, should be preferred to one who has not."² Government followed the policy of the Despatch in this matter; and the attractions of Government service made the university requirements a determinative factor in education.

14. The founders of the University of Calcutta at first acted consistently with the spirit of the Despatch. They provided in the first regulations for the entrance examination that in geography, history and mathematics, the answers might be given in any living language. "It was expected," says the report of the Bengal Provincial Committee of the Education Commission of 1882, "that under the shadow of this regulation a class of schools in which English would be taught as a language only, and all other subjects through the vernacular would spring up, and thus create such necessities for the preparation of school and other books as would lead to a wider diffusion of European knowledge among the people."

Possibly, say the Committee, such expectations would have been fulfilled to a greater extent than was the case if the permission to answer in the vernacular had been allowed to stand.³ But

¹ The passage is contained in para. 44 of the Despatch. We refrain here from entering into the complex history of the vernacular and Anglo-vernacular schools established by Government, of which an able account has been given recently by Mr. Herbert Stark, Principal of the Dacca Training College, in his *Vernacular Education in Bengal, 1813 to 1912*. (The Calcutta General Publishing Co., 1916.)

² See despatch, paras. 73-75.

³ *Loc. cit.*, page 10.

the Calcutta University withdrew the permission to answer in the vernacular, and in 1861-62 ruled that "all answers in each branch shall be given in English except when otherwise specified." The University thus stimulated education in the English medium at the expense of the vernacular, and the object of the Despatch in regard to this matter was defeated.

15. In 1864 the University, in further pursuance of their policy removed the vernacular from the courses for the first examination in arts and the B.A., and made compulsory the classical language to which it had been an alternative. But in 1870, they began to reverse their views, and a translation paper from English into the vernacular was introduced into the first examination in arts. In 1879, when regulations for female candidates were introduced, the vernacular was made an alternative for the classical language for such candidates at the same examination. For the sake of completeness we may add here that under the regulations of 1906 still in force (which were due in part not to the initiative of the University but to the recommendations of the University Commission of 1902) not only was an examination in a vernacular made compulsory at the entrance (matriculation) examination but permission was given to candidates who take up history to answer either in English or their own vernacular. Composition in a vernacular was also made compulsory at the B.A. examination, and at the intermediate and final examinations for the newly established B.Sc. degree. Thus the university regulations after departing widely from the policy of the despatch of 1854 in regard to the vernacular have since been made to conform to it.

16. The Commission of 1882 draw attention to an interesting experience in Bengal in regard to the age at which English should be begun as a medium for those who intend to pursue their studies in English, an experience dating from a time when the university regulations for the entrance examination excluded the vernacular entirely. The possibility of using English as a medium in the university course inevitably depends on the school training in that language, which is therefore a matter of vital importance to the University; and the Education Commission of 1882 gave considerable attention to it. They reported a striking difference between the views of the authorities of the Central Provinces and those of the Bengal authorities in regard to the age at which English should first be used as the medium of instruction. The Central Provinces

usually gave the instruction to the pupils in their middle schools through English on the ground that this led to greater success if they went on to a high school course than if they were less well prepared in English. But the Bengal authorities found by a comparison between pupils who had entered the high school system with scholarships that those who came with 'vernacular' scholarships showed a marked superiority at the university entrance examination over those who had entered the high schools with English scholarships. The Commissioners of 1882 themselves held that proficiency in English gained by the use of the English medium in the lowest classes would be at the expense of general education. They speak of a 'compensating condition' arising in the case of a boy transferred from a middle to a high school. But they did not fully explore their argument in its application to the high school curriculum as a whole. They recommended that the vernacular should be used as the medium in the middle schools; refrained from making any definite recommendation in regard to high schools, but commended the consideration of the matter to local Governments; and urged that the decision must depend on local circumstances and that the freest scope should be left to the managers of the schools.¹

17. Up till 1882 it appears to have been the general practice in Bengal to prescribe English as the medium for the whole of the high school course; but the authorities had made some experiments in the use of the vernacular medium which were commended by the Bengal Provincial Committee of the Education Commission,² and the Bengal authorities in two stages raised the age at which English is permitted in Government and aided high schools to be used as the medium to the present level of Class VII (Class X being the highest).³ Mr. Nathan (in the report referred to in the footnote) drew attention to the controversy between those who advocated the early use of English as a medium, and those who thought that by the use of the vernacular in the earlier stages the pupil would study more intelligently, be better trained intellectually, and eventually become more proficient in English as well as in other subjects; and stated that the tendency was to postpone instruction

¹ See Report of Education Commission of 1882, paras. 249, 250.

² Report of the Bengal Provincial Committee, page 153.

³ Fourth Quinquennial Review on the Progress of Education in India, 1897-98 to 1901-02, by R. Nathan, page 115.

through the medium of English to a later stage than had been previously thought desirable.

18. The Commission of 1902 condemned the use of English as a medium at too early an age, and the poor teaching both in English and the vernacular in the schools. The portions of their report relating to these subjects resemble, even after the lapse of 17 years, so closely what has been said by many experienced witnesses on the present occasion that we quote certain passages *in extenso*.¹ In regard to the teaching of English they write :—

" The declared object of the policy which led to the establishment of the Indian universities, was the extension of European knowledge by means of the English language in the higher branches of instruction. The proper teaching of English must for this reason be regarded as the most important matter in the curriculum of the higher schools and of the universities. Notwithstanding the prominent position given to English throughout the course, the results are most discouraging. Students after matriculation are found to be unable to understand lectures in English when they join a college. In some cases the difficulty is said to disappear after a short time ; but it appears to be the case that many students pass through the entire university course without acquiring anything approaching to a command of the language, and proceed to a degree without even learning to write a letter in English correctly and idiomatically. Even those who have acquired considerable facility in speaking and composition are, as we ourselves had many occasions of observing, lamentably deficient in pronunciation. The evil begins in the schools. The great object of parents and guardians is to pass their boy through the school course as rapidly as possible and pressure is brought to bear on managers of schools to promote pupils regardless of their fitness for such promotion. Boys begin to learn English as a language, and also to learn other subjects through the medium of English, long before they are capable of understanding it, and in the lower classes are taught by ill-paid teachers, who have no claim to be regarded as qualified to teach the language. Faults acquired at this stage are seldom completely eradicated, and, even when a boy reaches the higher classes of a high school, he is generally taught by a teacher whose vernacular is not English and who is wanting in the capacity to teach the language properly. Numbers of students reach the stage of matriculation without ever having heard an Englishman speak, and incapable of understanding English as spoken by those whose mother tongue it is. It is beyond our province to enter into details of management of the schools, but it is patent that if the universities are to turn out good students in English, boys must be better taught in this subject at school. We therefore venture to express our opinion that it is desirable that the study of English should not be permitted to be begun till a boy can be expected to understand what he is being taught in that language, that the classes at schools should be of manageable size, and that teachers whose mother tongue is not English should be

¹ It will be seen in what follows that though the great majority of our witnesses agree in the main with the Commission of 1902, a certain number are of opinion that English cannot be begun at too early an age. We shall discuss this point later.

passed through a training college where they may be tested in expression and elocution by an Englishman before they are given certificates to teach.”¹

In regard to the vernacular, they write :—

“ Speaking generally, we fear that the study of vernacular languages has received insufficient attention and that many graduates have a very inadequate knowledge of their mother tongue. We hope that the inclusion of vernacular languages in the M.A. course will give an impetus to their scholarly study ; and as we propose that courses of advanced study should be under the supervision of the University, we consider that the establishment of professorships in the vernacular languages is an object to which University funds may properly be devoted. We also think that vernacular composition should be made compulsory in every stage of the B.A. course, although there need be no teaching of the subject. The vernacular is already indirectly recognised where it is the language into which the student is required to translate. The evidence on this subject tends to show that translations are sometimes marked for the verbal accuracy of the rendering only ; the principle should be recognised that no translation is satisfactory unless it is properly and grammatically composed. Further encouragement might be given by the offer of prizes for literary and scientific works of merit in the vernacular languages.

Unless, however, a good training in the vernacular is given in the schools, no effort of the University will avail. At present the subject is frequently neglected and the teaching is relegated to ill-paid and incompetent instructors. As in the case of English, so in the case of the vernaculars, better teachers are a primary need. Every boy should, on the completion of his school course, be required to pass an examination severe enough to show that he has a knowledge of his own language sufficient to enable him to express himself with ease and propriety.”²

19. We have already pointed out that the regulations of the University have adopted the recommendations of the Commission of 1902 in regard to the question of the vernacular.

20. The Government of India Resolution of 1904 again drew attention to the neglect of the vernaculars. The Government mention, among the main charges brought against the educational system “ that in the pursuit of English education the cultivation of the vernaculars is neglected, with the result that the hope expressed in the Despatch of 1854 that they could become the vehicle for diffusing Western knowledge among the masses is as far as ever from realisation.”³ The Resolution defines the views of the Government in a later passage :—

“ It has never been part of the policy of Government to substitute the English language for the vernacular dialects of the country. It is true that the commercial value which a knowledge of English commands, and the fact that the final examinations of the high schools are conducted in English, cause the

¹ Report of the Universities Commission of 1902, para. 83, page 24.

² Loc. cit., para. 95, 96, page 28.

³ Loc. cit., para. 8.

secondary schools to be subjected to a certain pressure to introduce prematurely both the teaching of English as a language and its use as the medium of instruction ; while for the same reasons the study of the vernacular in these schools is liable to be thrust into the back-ground. This tendency however requires to be corrected in the interest of sound education. As a general rule a child should not be allowed to learn English as a language until he has made some progress in the primary stages of instruction and has received a thorough grounding in his mother tongue. It is equally important that when the teaching of English has begun, it should not be prematurely employed as the medium of instruction in other subjects. Much of the practice, too prevalent in Indian schools, of committing to memory ill-understood phrases and extracts from text-books or notes, may be traced to the scholars having received instruction through the medium of English before their knowledge of the language was sufficient to enable them to understand what they were taught. The line of division between the use of the vernacular and of English as a medium of instruction would, broadly speaking, be drawn at a minimum age of 13. No scholar in a secondary school should, even then, be allowed to abandon the study of his vernacular, which should be kept up until the end of the school course. If the educated classes neglect the cultivation of their own languages, these will assuredly sink to the level of mere colloquial dialects possessing no literature worthy of the name, and no progress will be possible in giving effect to the principle, affirmed in the Despatch of 1854, that European knowledge should gradually be brought, by means of the Indian vernaculars, within the reach of all classes of the people.¹

21. In the Government of India Resolution of 1913, it was stated that "there is much evidence to the effect that scholars who have been through a complete vernacular course are exceptionally efficient mentally."

The Resolution reported the fact that in some provinces special classes had been opened in secondary English schools for scholars who had been through the whole course at a vernacular continuation school, in order to enable them to make up ground in English ; and they recommended local Governments and Administrations to introduce these arrangements where they had not already been adopted.¹

22. The question of the medium of instruction in secondary schools was further raised by the following motion in the Imperial Legislative Council on March 17, 1915, by Mr. Rama Rayanigar :—

"That this Council recommends to the Governor-General in Council to have, in consultation with the Provincial Governments and Administrations, steps taken for making the Indian vernaculars media of instruction and the study of English as second language compulsory for Indian pupils in all secondary schools."

¹ *Loc. cit.*, para. 14, page 14.

The motion gave rise to a debate showing a very sharp division of opinion among the Indian members of the Council. Sir Harcourt Butler, then Member for Education, in summing up the debate reminded the Council that it was the accepted policy of Government that the vernacular should be the medium of instruction for boys up to 13 years of age, that the vernacular should be a compulsory subject throughout the whole course and that the only question at issue was whether English should continue to be used as the medium in the three or four high classes. The alternative proposed was not to reduce English education, but to teach English by the direct method, as a language, and at the same time to lighten the strain on the mind by introducing the vernacular as a medium of instruction; so that the question was one 'not of educational policy, but of educational economy' which it would require many minds to solve. Sir Harcourt said that in his own experience and that of many competent educationists (which he did not however regard as conclusive) there was markedly greater intelligence in the boy whose education had been conducted through the medium of the vernacular until the highest classes of the school were reached than in the boy who had had his education "conducted in English in what used to be called in some provinces the upper middle school." He thought that the matter should be referred by Government as an open question to the local Governments after the war; and Mr. Rayanagar thereupon withdrew his motion.

23. The importance attached to the subject by the Government of India is shown by the references made to it by His Excellency Lord Chelmsford in the speeches made by him at the general Conference of Directors of Public Instruction at Delhi in January 1917, and at the Conference of representatives of local Governments held at Simla in August 1917, to consider the question of English and vernacular teaching in secondary schools. In the later speech Lord Chelmsford put forward as the two desiderata to be kept in view 'first that students may be enabled to obtain a better grasp of the subjects which they are taught, and secondly that they may complete their secondary course with a more adequate knowledge of the English language than at present.'¹

¹ A summary of the proceedings of the conference is given in the volume of appendices to this report.

24. It is 84 years since the date of Lord Macaulay's minute and Lord William Bentinck's Resolution. We have seen that during that period the policy of Government has been unwavering in its double aim of conveying western education in its higher forms through the medium of English to the Indian peoples, and of encouraging the development of the vernaculars so as to fit them for every use. The answers to the minor problems in regard to medium which we have asked our witnesses to consider are all dependent on this main issue. It raises questions of the welfare of the different communities within the province, of patriotism, and of high politics, beside which the questions of educational psychology and of the linguistic capacities of the vernaculars, though factors, fade in intensity in the eyes of not a few of our witnesses in comparison with those other factors ; and many of the three hundred or so replies which we have received reflect in their warmth of expression the deep interest taken by the educated public of Bengal in this matter, an interest manifest to us during our tour through the province.

III.—The medium of instruction and examination above the matriculation stage. Introductory.

25. A systematic summary of the whole of the replies to Question 11 (greater in bulk than the replies to any other question) would exceed the space available for this subject ; nor could it do full justice to many of our witnesses, whose evidence deserves to be read *in extenso*. But we think that certain numerical analyses, combined with quotations from typical replies, will give a sufficient idea both of the facts of the situation, and of the state of opinion in Bengal in regard to it, which in a matter of language is of special importance.

26. The replies to Question 11(i), viz.,

"Do you hold that English should be used as the medium of instruction and examination at every stage above matriculation in the university course ?" may be analysed as follows :—

- (i) 129 are positively in the affirmative ;
- (ii) 26 are in the affirmative, with slight reservations, such as that English should be used for all purposes except teaching the vernaculars or Sanskrit ;
- (iii) 68 are in favour of a joint use of English and the vernacular either side by side in the same institution, or in parallel institutions.¹

¹ Only a few replies suggest parallel institutions.

- (iv) 33 replies suggest the gradual replacement of English by the vernacular as the object to be aimed at;
- (v) 37 are in the negative; and
- (vi) 9 replies are insusceptible of classification.

An inspection of the replies will show that a classification of this kind, though useful, cannot pretend to mathematical accuracy; and different critics might arrive at slightly different results.¹ But it may be said that those who wish for the maintenance of the present system or 'of the present system with slight modifications' form a little more than half the whole number; that about one quarter wish for English and the vernacular to be used side by side; that one eighth wish for the gradual replacement, in time, of English by Bengali. The simple negative gives only incomplete information as to the views of many of the witnesses in this category, who, had they given fuller replies, might have been classified under categories (iii) or (iv) above, or even under (ii); only a very few express themselves explicitly in favour of the complete replacement of English by Bengali.

27. It is a striking fact that the classification cuts across the divisions of race, religion, nationality and occupation. Hindus, Mosalmans, and Europeans, officials, non-officials, and teachers will be found in each of the main categories. The replies reveal a strong movement in favour of the immediate introduction of Bengali for some university purposes, and of its ultimate introduction for others, a movement of which there was little sign in the debate in the Imperial Legislative Council of 1915 (see paragraph 22 above). It is noteworthy that nearly all the more extreme advocates of the vernacular as a medium are in favour of making English a compulsory second language, both in the school and the university; and, on the other hand, that many of those who are in favour of using English as the medium in the university are no less in favour of using the vernacular as the principal medium in the secondary schools, a subject we shall deal with separately.

28. One further remark. Few, indeed, of our witnesses seem to have borne in mind the possibility of bilingual education such as is given in Wales, in Canada, in South Africa, and in Malta, within the British Dominions, as well as in other countries like Belgium and

¹ In counting the replies we have been obliged to reckon the replies from bodies such as the staff of Serampore College, the Scottish Churches College and the People's Association, Khulna, as units.

Switzerland, where a good working knowledge of more than one language is essential to large numbers of the more educated people. What is described as 'unnatural' by some of our correspondents has in these regions and countries become an accepted practice; and it is regarded by some, though not by all, as a valuable element in intellectual education, quite apart from the question of practical advantage. We postpone for the moment a statement of our own view in regard to a future policy. But we think it well by this prefatory warning to guard against a premature acceptance of extreme statements.¹ In regard to the question of using the vernacular as the medium in the university it will be probably most convenient to consider first those witnesses who desire a change, postponing however the replies of the Muslim witnesses on this and other points for separate consideration in view of the special linguistic difficulties affecting that community in Bengal,² difficulties which must form an important element when we pass from our analysis to the consideration of the problem as a whole. The question of Assam also needs separate consideration.

IV.—The medium of instruction and examination above the matriculation stage. Views of Hindu and European witnesses.

29. Mr. Brojendra Kishore Roy Chaudhury thinks that the medium of instruction and examination should at no stage up to the B.A. and B.Sc. standard be English; that great injustice has been done to students, their valuable time unnecessarily lost, their brains and physical systems unwisely and cruelly taxed, and in many cases altogether ruined, by making English the medium. He would have English as a compulsory second language in the three higher classes of schools and during all stages of the university course, such as would enable them to understand works in English and to express ideas in English in the subjects of their studies where necessary. He would abandon the use of English as the medium up to the I.A. and I.Sc. stage forthwith, and within five years or earlier, if suitable text-books are prepared, adopt the vernacular

¹ Some information in regard to bilingual education in the British Dominions is given in the Report of the Conference on Bilingualism, which took place at the Imperial Education Conference of 1911. (See Appendix I to Report of the Imperial Education Conference, 1911, Cd. 5666, page 244).

² See Chapters VI and XVI.

of the province as the medium. Mr. Bibhutibhuson Datta, University Lecturer in Applied Mathematics, quotes a speech by His Highness the Maharajah of Alwar, in which he said :—

“ While I do not minimise the importance of education being given to a higher standard in the English language, I do most emphatically maintain that for the sake of our nationality, our country and our religion, it is even more necessary for education to be given in a thorough manner in the vernacular.”

Mr. Datta continues :—

“ There is the more general proposition which has found the acceptance of all classes of thinkers that the children of a race would be best educated in and through their own mother tongue. The evil of forcing an alien language only serves to dry up, at their very sources, the very fountain springs of national power and thus impoverishes the nation on the side of initiative and originality. For a lesson appeals more to the head and heart of a boy and thus becomes more effective when it is conveyed through a medium in which the boy is fitted, by tradition and environment, to express his own thoughts; otherwise education becomes parrot-like cramming rather than intelligent understanding.”

Mr. Datta is in favour of English being taught as a compulsory second language. He thinks the vernacular should be used especially for science subjects and logic, to diminish the difficulties of the subject caused by technicalities and so to avoid the temptation to cramming. Mr. Mohini Mohan Bhattacharjee, University Lecturer in English, regards English as a bond of union amongst the races of India with their many languages, and as the key to one of the richest literatures of the world. It has, in his judgment, fostered the growth of the literature of Bengal. But he thinks Bengali should be the medium of instruction and examination at school, and an optional medium in the university up to the B.A. pass standard. He thinks it preposterous to attempt to teach a foreign language to children who can scarcely express themselves in their own. But he would have English a compulsory subject in school and for the B.A. degree in the university; and desires that every possible care should be taken to make the teaching efficient.

30. Mr. Dibakar Bhattacharyya, Officiating Head Master of the Burdwan Raj Collegiate School, Burdwan, thinks that the use of a medium other than the vernacular is “ most unnatural, unscientific and unnecessary, and nowhere followed in any part of the civilised world.” In his opinion Bengali has reached a state of development in which it can be adopted as a medium of instruction in all

university education. He admits as objections to its adoption (1) the existence of a minority of some 2 millions in Bengal speaking either Hindi or Urdu, (2) the difference between the dialects of Eastern and Western Bengal; but he thinks these can be surmounted. In regard to the question of school teaching he writes :—

" The aim of all instruction and education is the growth and development of the mind, and for the development of the mind the child must think for himself. Now when a difficult foreign language is the medium of instruction the thinking power of the young learner is weakened, though not destroyed, and his mental development is retarded. In history, geography, mathematics and other subjects his ignorance of English continually places him at the mercy of others; he always wants help and can scarcely stand on his own legs. He tries to learn English at the expense of other subjects so that English, like Aaron's serpent, swallows up all other considerations and becomes not the means to an end but the end itself.

The success of the work of the teachers of all other subjects depends mainly though not entirely on the work of a single man—the teacher of English. If he teaches badly all other branches of study suffer."

Mr. Birendra Kumar Datta of Mymensingh thinks that English should be made compulsory for all students, male and female, from the primary stage up to the end of university education, but that except for history and English the medium should be Bengali. He thinks that energy has been squandered on the learning of English which might have been more profitably spent in other directions. The pupils fail, he says, to enter into the spirit of their own culture and nation, and their own geography, history and literature remain unfamiliar to them. This, he thinks—

" explains the cause which prevents professors of our universities from taking an active interest in their work and from engaging themselves in any special department of science or literature. In fact up till now, with a few brilliant exceptions, the contribution of our professors to science and literature has been practically *nil*—a sad commentary on the system of education so long in vogue in our university."

Mr. Purnachandra Kundu, Offg. Principal of Chittagong College, wishes Bengali to be used at every stage of the pre-university and university course for all subjects except English, which he would have compulsory. He admits that " under the existing condition of Bengali literature it is impossible to rely entirely upon this language alone." But he would have the lectures delivered in Bengali, English being only used incidentally where for want of a proper vocabulary expression in Bengali became impossible or difficult. He thinks the change would ensure the better training of students, lighten their burden, and ' partially remove the

necessity of cramming.' Mr. Kundu thinks a 'fair grounding in English language' absolutely necessary.

Mahamahopadhyaya Pramathanath Tarkabhuhsana, University Lecturer in Sanskrit, and professor in the Sanskrit College, says that a large volume of public opinion is in favour of making the Bengali language the first language in the university curriculum and that the proposal has the strong support of the Bengal Literary Academy (the Bangiya Sahitya Parisad). The strongest argument urged by the supporters of the proposed change is, he says—

"that the effort spent in acquiring the power of expression in a foreign medium considerably interferes with the growth of thought. In other civilised countries the native language is the medium of instruction as well as examination. The knowledge of English literature is no doubt a highly desirable attainment, for it is the open sesame to a very large portion of the world's literature. But to the great majority of the university's products this knowledge proves an expensive luxury. Men cannot think soundly nor feel deeply so long as they have to do either apart from their mother tongue."

He would, as an initial measure, make the use of the vernacular as a medium optional up to the B.A. pass stage, for teaching and examinations. For higher examinations and studies, he would have the use of English optional in literary subjects other than English itself, but compulsory for the rest. "For," he says, "it is on all hands admitted that higher studies in this country would be promoted largely by acquaintance with the recent developments and researches in Europe and elsewhere in the civilised world—access to which is conveniently supplied by English." He thinks the study of the vernacular should be more serious and systematic than at present and that the practice of prescribing vernacular books solely because they furnish models of style should be discontinued. He suggests that vernacular books should be chosen which would supplement the knowledge gained by the study of other subjects of the curriculum, e.g., "those which would give an insight into the *Puranas*, social customs, natural resources, philosophical schools, and religious systems of this country."

31. The views of Mr. Krishnachandra Bhattacharya, University Lecturer in Mental and Moral Philosophy, closely resemble those of Mr. M. M. Bhattacharjee (quoted above) in regard to the use of English as a medium. Until there are proper text-books in the vernacular, he thinks the medium should be largely bilingual. In subjects other than English, he says that the student at present learns words rather than things and that in his examination papers

not only does he express himself clumsily but shows that he has "a peculiarly vague understanding, due to an unreasoning slavery to ill-understood words." Mr. Bhattacharya regards it as unnecessary and undesirable that every student in the University should study English literature. What is wanted of an Indian student, he suggests, is that he should have enough knowledge of the language to be able to understand English books and to express himself for practical purposes. The following passage in his evidence deserves quotation :—

"The distinction between the language and the literature should be made at once in colleges. English literature should be made an optional subject to be offered by only those who have special aptitude for it. As to practical training in the use of the language, exacting tests—oral and written—should be instituted at all stages and for all students, whether their general course of study be linguistic or not. English literature in the intermediate and B.A. constitutes the heaviest item in the present curriculum, though its actual educative value for most students is utterly disproportionate to the amount of time and energy spent upon it. To make it an optional subject would be to lighten the course considerably, and to render it possible to raise the standard in the subject which the student may elect to study instead."

Mr. Bhattacharya's colleagues on the staff of the Bethune College endorse his views; and demand that, as a corollary to the use of the vernacular and the cessation of the demand for English literature as a compulsory medium, the standard in the practical use of English should be raised, and that it should be enforced by stiff tests. The 'working English,' if taught by a more rational method than the present one, should, they think, be sufficient to serve for Government offices and business houses and as a *lingua franca* for the whole of India. But the real mutual understanding among the provinces so far as language can bring it about will, they suggest, "depend much less upon this *lingua franca* which can never become the language of the masses than upon the diffusion of a comparative study of the main Indian vernaculars and the gradual establishment of a common script." It is a little difficult to see how a comparative study of the vernaculars or even the use of a common script would help the masses of Southern India who speak Dravidian tongues to understand those of Northern India who speak the Sanskritic.

32. Mr. Santosh Kumar Chatterjee, Professor of History at Rajshahi, writes :—

"One great disadvantage of the present system is that, owing to the difficulty caused by the necessity of having to learn every thing through the

medium of English, students of average quality, whether in the schools or in the colleges, learn nothing very well. In intellectual capacity or zeal for knowledge Indian students are admittedly not inferior to the students of any race or nationality in any part of the world. And yet, owing to this unnatural system, Indian students are not as well grounded in the various subjects of study as are the students of the same age elsewhere when they leave school or college. All experienced Indian teachers realise that when a lecture is given in English, even to the college classes, they are usually confronted with vacant looks from the benches ; but if, and as soon as, the same teacher gives an exposition in the vernacular tongue the eyes of the students beam with lively intelligence and every word is followed with close attention."

He suggests that English should be the medium of instruction in the school course and up to the intermediate stage, and, if this is successful, up to the B.A. stage. But he would have specially trained teachers to teach English from the very beginning in the secondary schools.

33. We now take four European witnesses, all of them present or former heads of colleges of the Calcutta University, who are in favour of introducing the vernaculars into the university curriculum.

The Rev. A. E. Brown, Principal of the Wesleyan Mission College, Bankura, writes :—

" English alone should be taught through the medium of English, and all other subjects should be taught through the medium of the vernaculars.

At the same time it is recognised that, in some cases, foreigners will be compelled to deliver their lectures in English, especially in the higher stages, but even in such cases the student should have the option of answering the questions in the examination in the vernacular. The difficulty of assimilating ideas through a foreign language is not nearly so great as that of expressing one's own ideas through that foreign language.

We also recognise that a *working* knowledge of English is a practical necessity for every educated Indian. We consider therefore that there should be a compulsory test of English at every stage throughout the university course. The preparation for this compulsory course should be of a tutorial nature ; students should be encouraged to read good *modern* English, the more the better, and to write frequent essays.

The study of English literature would be a separate optional subject for I.A. and B.A."

The Rev. W. E. S. Holland, Principal of St. Paul's Cathedral College, Calcutta, writes :—

" I would advocate a much larger use of the vernacular in university education so that alternately [? ultimately] it may become the principal medium of education. I consider that a chief reason for the lamentably low standards attained in certain directions is due to the difficulty of the medium of instruction. It probably is also not without its effects on the intellectual attainment and capacity of our teaching staff. I consider the

Bengali student to be the equal in intellectual powers of the students of an English university ; and in distance he is hard to rival.... A large part of college teaching and learning is concerned with understanding the meaning of the English words in which the subject is being studied. There is the less time and strength for the attainment of high standards in the subject itself. I consider that the large number of failures at each successive stage in the university course is due to the same cause. The advance in standard in the particular subject that may naturally be expected at the end of a two years' course is too much when the difficulty of the medium is borne in mind. Further, freshness and keenness of interest in a particular subject evaporate when the medium through which it is studied interposes such difficulty..... Enquiries from staff and students alike have revealed the fact that they do almost all their thinking in the vernacular. To be educated in a language which is not the vehicle of thought must cramp intellectual development in all kinds of ways. The foreignness of our whole ~~curricula~~ sterilises our best Indian minds.

To return to the language of instruction. Bengal has a larger population than Japan. Yet Japan by use of the vernacular, has built up an educational system that commands the respect of the West. Bengali, Hindi, Marathi, Tamil, and Telugu (with perhaps Gujarati, Malayalam and Kanarese) would provide most inhabitants of India with at least a quasi-vernacular. And the first three would educate more than 200 millions of India's population.

I consider that the standard of English as a subject of study should remain pretty much where it is. Further, a sufficient working knowledge of English should be required to enable the student to read and understand the literature of the West. He should be able to study the best works in English on his subject just as many Englishmen can study works in French or Latin. Such a practical working knowledge of English is further absolutely requisite for political reasons. But that is no reason why the student should be lectured to or examined in English. If he is to think he will think most freely and fruitfully in his own language.

I should therefore require the standard in the school of English literature to remain much as at present. I should demand of all university students such a practical knowledge of English as to enable them to study English writings. And I should allow English as an optional language of instruction and examination. I should allow any lecture and examination papers, other than those in English literature, to be done in the vernacular. Let the student of English history read English historical works. But let him, if he likes, express his answers in the vernacular. And let his lecturer teach him in the same.

There will be a new outburst of intellectual life in Bengal when throughout their education they think and express themselves in the vernacular. And for its teachers, except in English literature, Bengal need be no more dependent upon England than is Japan."

Mr. W. C. Wordsworth, some time Principal of the Presidency College, Officiating Director of Public Instruction in Bengal, writes :—

" I believe that students should be permitted to use their own vernaculars in all university examinations, and that where the desire exists teaching should be given in the vernaculars so far as circumstances permitted.

....I consider that the majority of students have on their entrance to the University an inadequate command of English. Only a minority can talk or understand spoken English, and few are able to take down a piece of simple English from dictation.

I think that the teaching of English would be improved if schools were permitted to make it a second language, and not the medium of instruction in the higher classes.

I am not satisfied [with the kind of training now given in English before the entrance examination]. Numbers of teachers of English have not the necessary scholarship or familiarity with the language; they teach 'dictionary,' English, and deplorable grammar and pronunciation. I suggest an oral examination in English at B.A., and in schools, more dictation, reading, parsing, analysis—in short a general elevation of scholarship, competence, and instruction.

I would have training in modern English in school, the same with some English literature in the first two years of college life, and a more concentrated study of English literature, not neglecting grammar, composition, conversation, etc., in the last year.

....I would gladly see the University bring into association with itself the indigenous learning of the country, and confer its degrees on, e.g., Sanskrit, and Arabic scholars, who might be ignorant of English. I would make English merely an optional subject, but would have it understood that a candidate might be rejected for an inadequate knowledge of English, whatever course he offered, if he answered his papers in English."

Miss A. L. Janau, Principal of the Bethune College, Calcutta, eloquently presses the claims of the vernacular as the medium of university education. English, she thinks, should remain as a compulsory second language and be taught as a modern language, not as at present, 'as a sixteenth or seventeenth century literature.' But to her mind—

"there is no excuse for imposing English as the language of teaching or of examination, and so to impose it is to lay a burden on the Indian people which is likely to kill any originality of thought individual; may possess and is sure to kill the genius of Indians as a race."

Miss Janau regards the present practice as "the legacy of a time when the educational outlook of Englishmen was insular and narrow;" but in this, as will be seen from the earlier part of this chapter, she does an injustice alike to the founders of Indian educational policy and to their successors.

We may also quote with these witnesses Mr. W. A. Archbold, until recently Principal of Dacca College, and Mr. E. E. Biss, of the Indian Educational Service, formerly Principal of the Dacca Training College. Mr. Archbold writes :—

"Looking at the matter from the point of view of India as a whole, and especially from the point of view of the India that is to be, I am against the use of English as a means of instruction."

Mr. Biss writes :—

"I experimented in the Dacca Training College and the experiments seemed to show that the general education of boys would be much improved if they were taught throughout their school career through the medium of their mother tongue. I doubt whether, if this latter course were adopted, their English vocabulary would be as wide as it now is. Personally, I favour education rather than mere vocabulary, but consider that this is a matter on which the lead should come from the educated part of the Bengali nation."

Mr. T. T. Williams, Professor of Economics in Dacca College, says :—

"I feel that the stimulus which the University should give to intellectual life in Bengal is weakened and limited by making English the sole medium of higher education. The real initial difficulty would be found in the desire which nearly all those who seek university degrees have of learning English."¹

34. Mr. M. P. West, of the Indian Educational Service, sees only one of two sharply defined alternatives :—

"At present the boys of high English schools who go into the University do not know English well enough to follow the university course in that language, nor do they know the vernacular with any accuracy. They are language-less. It appears to me that it matters very little which language is finally decided upon, but it is necessary that it should be one language. If, from the very first, the boy is taught English and the mother tongue is definitely relegated to a merely spoken language, like the Sahibs' Hindustani, then by 18 any boy should be able to follow an English university course, and listen to lectures in English. He will not know Bengali accurately. It will be a merely spoken language like the mother tongue of Indians educated at schools in England. This is one alternative. The other alternative is to make English the mere second language, in this case not so much a colloquial language, as one for reading, like the scientist's German. Lectures will be in Bengali, examinations will be answered in Bengali, a Bengali necessarily admixed with English technical terms. Such Bengali is common at the present day. So is such English in England on any topic when the chief authorities are all written in French or German. Lewis' 'Education of the Far East' state that in the Japanese science courses a vernacular dictionary of technical terms is

consider that the loss of time and effort deducted from the real knowledge for the sake of the learning of a language is not worth geography and history were taught in Bengali, the boys might. Nor can composition and essay writing be taught as an art in an acquired foreign language.

Moreover how much English is learned from the language of rooms :- 'Cloud condensed द्वैरै रान् वर्ये वाते'

It is evident that more and more in the future the staff of education be Indian. In so far as Englishmen are needed I consider that it is to pay an Englishman his salary for two years while he learns the of the country than to pay for a whole educational system for two years while the pupils learn oral English. There is no reason why an English not lecture in Bengali as understandable as the English of a. The missionaries give two years' language teaching to their new they do their propaganda in Bengali—and they know more of the and its ways than the whole educational service put together.

35. Mr. F. J. Monahan, Commissioner of the Division, while strongly urging the claims of Bengali adopted as a university medium, suggests that there should be a double system of institutions for higher education, the one in Bengali, the other using English as the medium. He writes:

"In the course of my official work I have had considerable opportunity of judging of the knowledge of English possessed by the average youth who has passed the matriculation examination of the Calcutta University, and I am satisfied that the great majority of those who pass that examination are quite incapable of following intelligently lectures given in English. I am convinced that the use of English as the medium of instruction and examination in the university course is chiefly responsible for the very low standard of what is called 'higher education' in this country."

While saying this I do not wish to dispute the soundness of the decision to impart higher education through the medium of English, at the time when it was taken by the Government of India. At that time, the indigenous system of education in India had fallen into decay.

There was no living Bengali literature, and the fact that there had ever been a literature in Bengali was almost forgotten. The future of the Bengali language and literature could not be foreseen. At the same time, large numbers among the Hindus of the higher castes showed great aptitude and eagerness in acquiring English.

Probably, the only practicable means of diffusing Western knowledge and ideas in India, which could then have been adopted, was that of giving higher education solely through the medium of English, and it cannot be denied that this method has been attended with considerable success, and has conferred great benefits on India in the moral as well as the material order.

What I submit is that this method as the sole method of higher education countenanced or assisted by Government in this country, has become out of date, that it is no longer necessary, and that it is having a bad effect in

¹ We discuss some of the possibilities and difficulties of such a system, in para. 61 below.

stunting and retarding the intellectual development of a naturally gifted people.

After a century and a half of British rule, English has not become the language of any important section of the people of Bengal, to the extent of being their mother tongue. To the great majority of people of all classes in Bengal English is now, and, so far as can be foreseen, is likely always to remain a foreign language, and Bengalis are not exceptions to the general rule among human beings in that they find it easier to acquire knowledge through the medium of their mother tongue than through a foreign language. When forced, as a condition of making a living, to learn subjects through the medium of English and pass examinations conducted in that language, they naturally fall back on that powerful instrument, their memory, and it is not surprising if, as I am told, students of the University are disposed to look upon attendance at lectures as a useless formality and a waste of time, which might be more profitably employed in 'study' after the modern Indian method, that is, in learning passages of text-books by heart. I notice that parents of students, who are, for any reason, prevented from attending college for a time, are concerned, not on account of any interruption of the young men's education, but because they may be unable to make up their 'percentage of attendances.'

There are some classes of people in India, for whom instruction through the medium of English is suitable, namely, Europeans and Anglo-Indians, and some few Indians (a very small number at present), for whom English is really their home language and mother tongue, but, for the great majority of boys and young men in India, it is, and, for an indefinite time, probably, will remain practically impossible to acquire at an early age such a knowledge of English as would make English for them a suitable medium of instruction at any stage of their university course. Still less is English a suitable medium of instruction for the great majority of boys in secondary schools. . . .

The most highly educated Bengalis—distinguished barristers, high officials, members of the Legislative Council—when conversing among themselves use Bengali, often, no doubt, with an admixture of English words. In short with very few exceptions, the educated Indian using English is at much the same kind of disadvantage as an Englishman when using any foreign language which he knows well. He is not quite free in expressing his ideas—often, perhaps unconsciously, he says, not exactly what he means, or would like to say, but what he happens to know, or thinks he knows, the English for, and he fails to do justice to himself.

On the other hand, the Bengali language has developed greatly since the time when the English policy in higher education was adopted, and there is now a vigorous and growing Bengali literature, so that there will be no real difficulty in teaching all subjects through Bengali, if that method of instruction is encouraged by Government and the University. Suitable Bengali text-books are, no doubt, at present, wanting, but such books, or Bengali translations of English text-books, would be produced very rapidly with proper encouragement. If it be objected that the Bengali language lacks certain scientific terms, I would say that such terms may easily be borrowed by Bengali from other languages, as they have been borrowed by the English language from Greek and Latin. There exists in Sanskrit a rich store of scientific words, which can be introduced into Bengali naturally and easily; besides, new words

may be formed to an almost unlimited extent from Sanskrit roots. Or it may be found more convenient for Bengali to borrow words from Greek or from Latin, or from English. The Bengali language has taken in the past many words from Persian and Arabic, as well as from English, and it is constantly taking new words from English. The existence of different languages in the different countries of Europe does not prevent each European country from profiting immediately, in its education, by every advance in knowledge achieved in another country, while using its own language as the sole medium of instruction within its borders, and there is no reason why the use of Bengali as the general medium of instruction in Bengal should prevent Bengal from keeping pace with the general progress of the civilised world."

Mr. Monahan goes on to advocate a greater use of Bengali for administrative and judicial purposes ; and then continues—

" it seems to me that, in a country like India, with its great variety of races, languages, civilisations, ideals, religions, and philosophies, it is a mistake to impose on the whole population one method of higher education, through the medium of a foreign language, and uniform sets of university courses, at the same time making the university examinations the sole avenue to employment in the middle and higher ranks of the public services and in the professions. I think that a good deal of the discontent prevalent among Indians of the upper and middle classes is traceable to this. I would suggest that, on the one hand, university examinations should cease to qualify for posts under Government, subject, possibly, to certain exceptions, in the case of technical departments, and that, on the other, the University should be organised on a more catholic principle, and should admit to affiliation colleges and other institutions of higher education teaching different courses, and using different languages as their media of instruction, only assuring itself that the standard of teaching is sufficiently high. For the great majority of students the most suitable medium of instruction would be their own mother tongue, or ' vernacular '—to use the official expression—but, for some, English would be a suitable medium of instruction. I would leave students free to choose the course which they will follow, the University only insisting that the matriculation examination for admission to any course shall thoroughly test the student's knowledge of the language which is to be the medium of instruction in that course. For admission to a college or a course in which English is to be the medium of instruction, the standard of English in the matriculation examination should be much higher than it is at present. For admission to other colleges and courses the matriculation examination might include either no English at all or only elementary English, as a test of general education.

I should anticipate that, under such a system, the great majority of university students in Bengal would enter colleges or courses in which the medium of instruction would be Bengali, but for some there would be colleges or courses in which the medium of instruction would be English, for others it might be Hindi or Urdu. I think that the Sanskrit College, Calcutta, and higher grade Sanskrit *śāls*, as well as institutions for Islamic studies throughout the province should be affiliated to the University.

Under such a system, there would no longer be general university examinations for all affiliated institutions. There would be different examinations

for different institutions, or for groups of institutions teaching the same course, the examination being conducted in every case in the language in which the course was taught. According to the character and importance of the different institutions, and the wishes of their governing bodies, an institution might be left to hold its own examinations, the University merely satisfying itself that they were properly conducted, and up to a fairly high standard, or the University might help affiliated institutions by holding examinations for them. Obviously, under this system, the degrees of all colleges would not have equal value, but this does not seem to be a serious objection. Degrees obtained from different colleges would find their different levels of value in general estimation, it being the business of the University, however, to see that none fell below a certain level. Sanskrit colleges and *cols* would confer their own special titles, as heretofore."

36. We next come to a group of witnesses who, though not less enthusiastic for the cause of the vernaculars, are more conscious, first, of their present deficiencies; secondly, of the importance to India of English both as a unifying influence and as a means for keeping in touch with western knowledge; and, thirdly, of the practical difficulties of any sudden change.

37. Mr. Sushil Kumar De, University Lecturer in English, writes:—

"There cannot be any doubt that every system of national education ought to take the national tongue as the basis: but apart from this question, let us take the practical consideration, *viz.*, whether the waste of time and energy over the acquisition of a foreign tongue, which this anomalous system involves, ought not to make us pause and consider the desirability and feasibility of making the vernaculars the right and proper medium of instruction. The genius of the English language differs entirely from that of the oriental languages to which our students are born and the laborious process of acquiring it absorbs so much attention that it necessarily leads to considerable weakness in other subjects. Eight years of school-life and three or four years in the colleges are spent more or less entirely in the acquisition of this all important foreign tongue and one cannot but be struck if he imagines the stupendous amount of wastage of intellect and energy which such a process entails.

It will not be seriously disputed, I think, that it is desirable to recognise the claims of the vernaculars to be the medium of instruction: but the most important question is how far it is feasible and practicable to do so. The system has become in course of time so deeply and firmly rooted in our institutions and our students and professors have become so thoroughly accustomed to it that any alteration in this direction is apprehended to be productive of the greatest confusion and evil by disturbing the settled order of things. On the other hand, the growing adaptability of vernaculars as a medium for teaching and their immense possibilities, combined with the fact that these possibilities can be best developed by proper university recognition, make it almost imperatively necessary to introduce the vernaculars as the proper medium. Recognising these difficulties on both sides, it is

obligatory on us to make a carefully considered and cautious advance, steering clear of thoughtless impetuosity on the one hand and of equally thoughtless sneer and banter on the other.

The best course, in my opinion, would be to introduce the vernaculars by stages and by slow degrees so that they may gradually replace English as the sole medium. I do not believe in reforms by leaps and bounds, however imperative the suggested course of reform may be. If English is suddenly replaced by the vernaculars there can be no doubt that it will bring the gravest confusion into our educational system, such is the accustomed groove into which it has been led."

Mr. De suggests the gradual extension of existing options in the use of the vernacular in teaching and examination, English being used as the medium in subjects in which it is not yet practicable to introduce the vernaculars. Mr. Banapada Dutt expresses similar views.

38. Mr. Ramananda Chatterjee, the editor of the *Modern Review*, says :—

" My idea is that our students should learn English for culture, for purposes of inter-provincial and international commerce and communication, for administrative purposes, for the political unification of India and inter-provincial exchange of ideas, for keeping touch in all respects with the outer world, and for the acquisition of the latest modern knowledge. But, for the perfect assimilation of knowledge in childhood and youth, for the thorough and rapid diffusion of knowledge among all ranks and classes of the population, for removing the recent but growing intellectual and cultural gulf between our men and women and between the classes and the masses, and for stimulating originality in thought and its expression and in scientific and artistic achievement in the largest possible number of persons, the use of the vernaculars in all grades of university education is indispensably necessary. All objections have force only temporarily ; for the most highly developed modern languages and literatures were at first no better than Bengali. In their case development was obtained by use : and it will be obtained in our case, too, in the same way."

In order to test how far Bengali can be used both as the medium of instruction and of examination he advocates parallel examinations in English up to the highest standard, though success in the vernacular examination would not ordinarily qualify for the public services. He suggests that examinations in Bengali would be specially suitable for women.

39. Mr. Surendranath Das Gupta, Professor of Sanskrit at Chittagong, argues that no person has ever been able to produce anything which has stood the test of time in a foreign language, and that it will be impossible to stick to the English language as the medium of the future delivery of the country before the bar

of the nations of the world. It becomes necessary that the best intellects of the country should think out the highest problems in the vernaculars and express them through that medium. But Bengali is not yet sufficiently developed to bear such a burden ; and it is only by being used in schools and universities that it can be so developed. If the dignity of the language is not established the general masses of the people will continue to be separated from the educated classes ; there will be no chance of men of genius and intellect rising from the masses through private studies and an enquiring spirit, as they have done in other countries, for the Bengali language will remain a local jargon, the future capabilities of the language will be ruined, and " man for man it will be difficult for a Bengali to compete with a person of any other nationality in the world." (Mr. Das Gupta forgets that some of the greatest of writers have been bi-lingual. Roger Bacon and St. Thomas Aquinas, like all their western contemporaries, wrote in Latin ; Francis Bacon and Descartes wrote some of their works in Latin, others in their vernacular ; Leibnitz, at a later date, wrote in Latin and in French ; one of the most distinguished of contemporary English novelists is a Pole). Mr. Das Gupta would allow university teachers the option of lecturing in English whenever the nature of the subject is such that it cannot be expressed in Bengali ; and he thinks that every university student should have sufficient knowledge of English to follow a university lecture in that language. Like other witnesses he would have well trained teachers in English for the lowest classes, and would give a practical training in English apart from English literature. He thinks that much time is wasted by the ordinary boy in the study of Shakespeare and Milton.

Rai Yatindra Nath Choudhury, who writes on lines generally similar to those of Mr. Das Gupta, suggests that a declaration should be made by statute that 20 or 25 years hence all higher education should be imparted through the vernacular.¹

40. Mr. Radhikanath Bose, Principal of the Edward College, Faribna, thinks it will be admitted that the present system of imparting instruction to Indian boys through a foreign tongue is unnatural and educationally unsound ; and that nothing would be better calculated to enable the students to assimilate knowledge easily, quickly, and thoroughly than the use of the vernaculars as media

¹ Question 1.

of instruction. On the other hand not all the vernaculars of the Presidency are sufficiently developed to serve as media of instruction even up to the matriculation standard. Assuming that proper text-books in the vernacular will soon be forthcoming, the extent to which they should be used to replace English text-books remains to be considered. In doing this, he says:—

“We must remember that the peculiar circumstances of our country render it imperatively necessary for our students to acquire an efficient knowledge of the English language. English is the only actual *lingua franca* in India at present, and is the only unifying modern language; it is our principal and practically only means of access to the highest western learning, and it is the only language which can keep us in touch with the world outside India. A command of the English language is thus indispensable to an Indian student not only for success in public life, but also for acquiring the highest western culture at an advanced stage of his university career.”

Mr. Bose thinks that the discontinuance of English as the medium would probably render the student’s knowledge of the language poorer, so he advocates that the vernacular should only be used for the non-language subjects, and only up to the intermediate stage. He advocates a practical system of teaching English in schools (for which reference should be made to his evidence) and deplores “the appalling amount of useless rubbish now-a-days forced into young boys’ heads under the name of ‘English Grammar’.”

41. Mr. Jatindra Chandra Guha, Professor of English at Rajshahi, would, like Mr. Bose, use the vernacular medium of instruction and examination in schools and for instruction in the first two (intermediate) years of the university course. He thinks the vernacular is too imperfectly developed to be used for university examinations.

“The practice in vogue,” he says, “amongst the teachers in colleges is to lecture to their classes in English; but there is no bar, so far as I know, to their using the vernacular for the same purpose excepting the force of a fixed practice and tradition in favour of the use of English; and I know of some teachers who make use of a happy mixture of English and the vernacular while teaching their classes.”

In reply to those who fear that the use of the vernacular would lessen the familiarity with English he urges that the course of sound knowledge (generally) ought not to be sacrificed to the object of acquiring a good knowledge of English. He suggests that the teaching of English should be strengthened in the schools; but adds that “the direct method of teaching English as far as our

schools are concerned, cannot, from the very nature of things, mean anything but a travesty of the real thing ;" and proposes 'a middle course' between the scholastic and the colloquial methods.

42. Dr. Nares Chandra Sen Gupta of Dacca would have university teaching in English or the vernacular at the option of the teachers, but thinks that for some time yet all the teaching in the higher branches will be in English. He thinks that most teachers in secondary schools do, as a matter of fact, use the vernacular as the medium of instruction, and that this makes the instruction more effective and should be the general rule. He would have the direct method used in schools, with plenty of translation, composition, and extensive reading of a number of books without too close attention to the interpretation of particular passages, in schools ; and would have English teaching of a practical character for all university students.

43. Mr. Manmathanáth Ray, Professor in the University Law College, would have the use of the vernacular optional for instruction above the matriculation ; but he thinks the option to use the vernacular as a medium of examination should be limited to some subjects at the intermediate. Although the vocabulary and terminology of Bengali have become strengthened in recent years he regards them as insufficient yet to allow the vernacular to be used for all subjects of examination. He thinks that the saving of time effected by using the vernacular as a medium could be used for raising the standard of English teaching in schools both in respect of grammatical accuracy and of powers of conversation. He thinks every one should read the master-pieces of English literature, whether their general course of study is linguistic or otherwise ; but advocates the study of such works as those of Bacon, or Huxley, etc., for B.Sc. students.

44. Mr. Meghnad Saha, Lecturer in Mathematical Physics at the University College of Science, thinks the teachers should have the option of using the vernacular up to the intermediate course. According to his personal experience in coaching students for the intermediate examination the vernacular is a better medium of instruction than English. He thinks the vernacular should be used as the medium of instruction in secondary schools. But he recognises that an adequate knowledge of English is a matter of national necessity and of daily importance. He believes that what should be insisted on is the acquisition of the capacity for

understanding English, and reading English with fluency, but not the capacity for writing English correctly, which requires 'time, study and long practice.'

45. Dr. Brajendranath Seal carefully distinguishes the different uses of English. "We must," he says, "keep in view the different uses of English (1) for study, e.g., of English text-books, (2) as a medium of instruction, (3) as a medium of examination, written as well as oral, (4) for conversation and correspondence." He would have English correspondence practised by all alike; and English text-books used in all stages of higher secondary and university education in studying all subjects (except oriental languages, classical and vernacular); though he would use vernacular text-books concurrently, where practicable. As a medium of instruction he would introduce English in the last two years of the school course but keep the vernacular in certain subjects, e.g., history and science (free use being made of English technical terms and nomenclature). He would use the vernacular for logic, economics and Indian history up to the intermediate stage. As a medium of examination, he would allow the candidate to use the vernacular at his own option at the matriculation and at the intermediate in Indian history, logic and economics, when a sufficient number of suitable vernacular text-books are forthcoming; and he would treat professional and technical subjects (other than law, medicine, and engineering) in a similar way. To facilitate the use of Bengali for purposes of instruction and examination, he thinks authorised lists of Bengali technical terms and nomenclature should be prepared in consultation with the Sahitya Parisads of the country, and circulated to schools and colleges.

Dr. Seal thinks that an undue value is attached in the matriculation scheme to the translation into English from the vernacular and that this is a 'trick that may be learnt mechanically.' The 'direct' method of teaching in schools he regards as 'not practicable in any real sense.' He suggests that an officer should be deputed to study the methods of teaching English in certain European countries, America and Egypt. Pending his report, he would encourage the encouragement in schools of English conversation, story telling, oral description, and of original composition. He pleads for the study of comparative literature as a vital need of the University.

46. Dr. P. Neogi, of Rajshahi, points out that there is only one major vernacular in Bengal and four minor, Hindi, Urdu, Oriya and Assamese; and further that—

“ the second point in this connexion is to clearly recognise that the study of the English language is indissolubly connected with university education primarily for three reasons, viz., (1) English is the court language of India, (2) it has become the *lingua franca* throughout India amongst educated people and no single vernacular can hope to take its place and (3) it is the medium through which western science and thought of an advanced character will have to be imported into India for a long time to come.”

He proposes that—

“(1) primary education should be entirely conducted through the medium of the vernaculars;

(2) English should be taught as a compulsory second language in all secondary schools;

(3) so far as the case of the Bengali students (Hindus and Muhammadans) is concerned, Bengali should be the compulsory medium of secondary education, and Bengali candidates for the matriculation examination should be required to answer question papers in all subjects in their mother tongue. In the case of students having Assamese, Hindi, Urdu, or any other vernacular they should be given the option to answer questions either in their vernaculars or in English.”

He proposes further that a distinction should be made between Bengali and other minor vernaculars as the latter may not contain suitable text-books. At present, he says, candidates have been given the option to answer questions in their vernaculars so far as history is concerned but this option has not much been used by candidates because head masters advise the students to read history through the medium of English, their argument being that the students thereby would learn more English. Unless the system of compulsory answers in Bengali be introduced in all subjects in the matriculation, the experiment of having the vernaculars as the medium of instruction will not, he thinks, succeed. As regards text-books in Bengali they already exist so far as history, geography, arithmetic, geometry, etc., are concerned; and Dr. Neogi believes that text-books in all subjects of the matriculation would be forthcoming the very year a scheme such as he proposes is introduced.

Dr. Neogi would gradually and in stages alter the university medium from English to Bengali. At present he would make Bengali optional as a medium of instruction and examination at the I.A. and I.Sc. stages; but would keep English as the sole medium for the higher stages.

He suggests the institution of an M.A. degree in Bengali with a high standard, and only two classes ; and urges a more systematic study of Bengali literature at the undergraduate stage.

47. Mr. Haridas Bhattacharyya, University Lecturer in Philosophy and Experimental Psychology (and Honorary Professor of philosophy and logic at the Scottish Churches College) thinks that the use of vernacular as the medium of instruction both in schools and at the university should be optional up to the intermediate stage. He gives the following reasons against adopting it as the only medium of instruction :—

- “(i) This would mean the total elimination of foreigners from the teaching staff of intermediate classes which is not desirable.
- (ii) There would be a difficulty about fixing the number of vernaculars. There is a large body of non-Bengali students within the Presidency and one institution at least must continue to teach through the English medium or a multiplicity of classes would be necessary.
- (iii) Teachers and students do not belong to the same district. Provincialism and local intonation of teachers would stand in the way of an intelligent following of lectures in some cases.
- (iv) Some teachers would find it very difficult to deliver lectures in Bengali. Speaking for myself, I can hold and have held informal classes up to the M. A. standard in Bengali, but I am not sure whether I should be able to address a big class in Bengali. The inevitable result would be that hybrid Bengali would be the medium of instruction.
- (v) There is a paucity of good vernacular books on scientific, technical and serious subjects (that can be recommended to teachers and students). The few that exist are full of Sanskritic words that are harder to understand than their English equivalents.

Some of these difficulties will of course vanish in due time but some are likely to persist.”

In regard to the question of the medium of examination up to the intermediate stage, he says there are two alternatives : either the training in English must be improved or the vernacular must be used as the medium. Mr. Bhattacharyya finds that a major portion of the matriculates follow quite intelligently the lectures delivered to them in English ¹ but they think in their vernaculars and can only express themselves imperfectly in English. Mr. Bhattacharyya thinks the complaint that students cannot write good English is well founded ; even M.A. examinees, he says, make ludicrous

¹ Mr. Bhattacharyya differs in this finding from a large number of other witnesses of experience and explains what are in his view the causes for the want of understanding noted by other observers.

blunders, which but for a mechanical system of examination would have been weeded out at a lower stage.

In regard to higher degrees and the question of English as a *lingua franca*, Mr. Bhattacharyya writes:—

“I am however deliberately of opinion that in the degree and the post-graduate stages English should be the medium of instruction. Students should be induced to have first-hand acquaintance with the master minds of the West.... Besides, a certain percentage of teachers at these stages is likely to be English.

I have however no objection to the medium of examination being vernacular in some specified subjects even in the degree stage, but honours students must always answer in English. English should be the medium of instruction and examination in the post-graduate stage, notwithstanding the fact that a plebiscite of this session's sixth-year philosophy students (numbering about 100) was in an overwhelming majority in favour of a vernacular medium of instruction.

I do not share the opinion of those who on political grounds object to a vernacular medium or of those who think that political unification should come through Hindi and not English as the *lingua franca*. I think that the plan that I suggest will be found satisfactory, even from a political standpoint, as it is not desirable that an active interchange of ideas through English should take place before the degree stage. The compulsory English medium of instruction at the degree and the post-graduate stages would continue to make English a political bond of unity.”

Mr. Bhattacharyya hopes that the optional use of Bengali is likely to enrich it; “One hundred years' English teaching has not produced a notable publication in the dialect of the province embodying the assimilated western wisdom. It is not thought possible or necessary to express western ideas in an eastern garb.”

48. We now come to the witnesses who desire the present system to continue and are opposed to using any other language but English as the medium of instruction above the matriculation stage. It is interesting to note that of these many are of opinion that the maintenance of English as the university medium is in the interest of the development of the vernaculars.

49. The most sturdy exponent of these views among the Indian witnesses is, perhaps, Dr. Hiralal Haldar, University Lecturer in Philosophy, and a member of the staff of the City College. He writes as follows:—

“I am strongly of opinion that English should be used as the medium of instruction and of examination at every stage above the matriculation in the university course. To do anything likely to weaken the knowledge of English of our students would be disastrous to the best interests of the country. I am

aware of a movement in Bengal which has for its aim the substitution of Bengali for English as the medium of instruction. This is, to some extent, one of the many expressions of the Chauvinism which is such a marked feature of the Bengal of to-day. But I see no reason for changing the system which the pioneers of English education in this country adopted after much deliberation. The analogy of other countries is misleading. The conditions of India are peculiar and what may be fitting elsewhere is not so here. India is a part of the British Empire and the most important bond which connects it with that Empire is the English language. The leading citizens of India must be in close touch with the ideals, culture and civilisation of the West, and this is possible only through the medium of English. I shall, no doubt, be told that English will continue to be taught as before. But it must not be forgotten that students learn English not merely by studying the prescribed text-books in that language, but also by reading books on other subjects written in English and because English is the medium of instruction and of examination. Even so, a considerable proportion of the students do not properly understand the books recommended by the University because of their imperfect knowledge of the language in which they are written. This state of things will only be aggravated if the proposed change is carried out. Further, in the interests of the Bengali language itself, it is necessary that our students should be well grounded in English. Bengali literature has been enriched only by men who knew English thoroughly well. I am not aware of a single distinguished Bengali prose writer without any knowledge of English. Where, for example, would Sir Rabindranath Tagore have been if his culture had been purely indigenous, and if he did not draw his inspiration from the art and literature of the West?"

50. Mr. Manmathanath Banerji, Lecturer in Experimental Psychology in the University College of Science, writes:—

"The medium should remain as now—English. Though it might be easy for students to understand things explained in vernacular, they are unable for want of practice to express their ideas in writing it. Thus though there is a provision for answering questions on history in the matriculation examination we know students generally do not avail themselves of this opportunity. The compulsory paper on the vernacular in the matriculation, I.A., I.Sc., and B. A. examinations cannot be said to have raised the standard of culture to the desired level.

There is moreover at present no standard of style in Bengali. The literature is passing through a period of transition. The classical style set up by pandits which was supplanted by Bankim's 'modern Bengali' has probably disappeared for good. Bankim's style, which cut a midway between local provincialism and anglicised literature on the one hand, and the classical style on the other, is in danger on account of recent authors having refused to pay any regard to rules of grammar and syntax. The colloquial holds the day and the literature is fast dwindling into spoken *Prakrit* at the hands of the disciples of Sir Rabindranath Tagore. In spite of volume and richness of thought the literary style is unsettled and there are no suitable text-books in most of the subjects at present. As the literature is giving place to various provincial spoken dialects the prospect of unity through literature is not much at the present moment. Then again the vernacular

literature could only unite a province at best and there are more than a dozen vernaculars in the country, to say nothing of sectarianism due to religions in the same vernacular. The creation of the vernacular as the medium of examination would in my humble opinion lead to much bickering among the writers of Bengali. Moreover if English is delegated to the position of a second language the student's knowledge of it will suffer as in the case of other languages which have been given a similar position. Everybody knows a B. A. does not attain to the same standard in Sanskrit as he does in English, though he might be studying the two subjects all along.

English on the other hand, is more read and cultured at the present day than any other language in the country and hopes of unity in India lie more through the English language than through the vernaculars. Thus I am not in favour of disturbing the present state of things as regards the medium of examination in the University."

51. Rai Kumar Kshitindradeb Mahasai stigmatises the desire to use the vernacular for the university medium as 'neo-patriotism.' He asks where the men are to be found capable of teaching higher subjects in Oriya, Assamese, or Khasi. He regards it as 'preposterous to question the position of the English language as a medium of instruction' and thinks the adoption of the vernaculars would be a severe set-back to progress.

52. Rai Lalitmohan Chatterjee Bahadur, Principal of the Jagannath College, Dacca, advocates the exclusive use of English above the matriculation stage on four grounds, (i) because of its use as the common medium of expression in India, (ii) because he thinks the vernaculars, and especially Bengali, are being enriched by the study of English literature, (iii) because a knowledge of English 'is and will continue to be a great help to Indians for making their way in the world,' (iv) because advanced books in all subjects in Bengali do not exist now and cannot be prepared soon.

For the encouragement of the vernacular he advocates a system of university extension lectures in Bengali. He says :-

"It is true that students on their entrance to the University have not an adequate command of English. But the remedy lies in improving the teaching of English in schools. Moreover the real difficulty of the college student in studying subjects other than English is due not so much to his poor knowledge of English as to his lack of mental training. For instance it is generally found that a student who cannot express his thoughts in English will hardly do better in Bengali."

He urges the use of the direct method. "The speaking of correct English with good pronunciation and the cultivation of a simple and idiomatic style of writing should be the chief aim."

Indian students proceeding abroad to study in Japan, America, or England, (iii) because of those students who close their academic career to seek employment under Government or with private firms, (iv) because the conflicting claims of various vernaculars would lead to confusion.

56. Miss L. Sorabji, Principal of the Eden High School for Girls, Dacca, writes :—

" I do think that English should be used as the medium of instruction and of examination at every stage above the matriculation in the university course. Apart from other reasons one potent objection to employing the vernacular as the sole medium of instruction would be that you limit the work and influence to the vernacular possibilities of the province. I mean that you are hampered in your choice of the best possible material on your teaching staff by the minor consideration of language ; furthermore, you limit the pupil to the thought current in that vernacular, and this may prove most dangerous, politically and morally."

57. Mr. R. P. Paranjpye, Principal of the Fergusson College, Poona, would not use vernaculars as media of instruction and examination above the matriculation stage ; but would give candidates the option of using the vernacular at matriculation. He would allow secondary schools to use either the vernacular or English, or (as Mr. A. C. Chatterjee suggests) a combination of English text-books with vernacular teaching.

58. Dr. Tej Bahadur Sapru of Allahabad, writes :—

" At present and for many years to come I think English should be used as the medium of instruction at every stage above the matriculation in the university course. I must, however, candidly say that I am a strong advocate of instruction through the medium of the vernaculars, and I feel sure that, if we had a sufficiently large and varied literature in the vernaculars of our provinces, I should not at all hesitate to advocate an immediate change. . . . I think it is clearly the duty of the universities to recognise the importance of vernaculars as a surer medium of national regeneration and elevation, and if they can only do this I feel confident that the progress will be much more rapid and more varied. . . ."

59. We quote finally among the non-Muslim Indian witnesses who share the view that English should continue for the present to be the medium of university instruction the veteran scholar, Sir R. G. Bhandarkar, who writes :—

" The general drift of ideas conveyed by the university education that is given to Indians is European and English. The vernaculars have not yet been fully developed and adapted for the expression of these ideas. A suitable literature, in what I may call European subjects, has not yet sprung up

amongst us. In this state of things education and examination through the medium of the vernaculars cannot, I believe, be effective; and if the use of vernaculars is forced upon us it is apt to lead to the formation of a mongrel dialect half English half vernacular."

He then speaks of the special difficulties of the Bombay Presidency and concludes: "the substitution of vernaculars for English must be left for the future."

60. We have quoted the opinions of four European principals of Calcutta colleges in favour of the introduction of the vernacular as the university medium. But they form a minority. Mr. F. C. Turner, Principal of Dacca College, writes:—

"I consider that a university in which at any stage any subject is taught through a medium other than English is at present an impossibility. The poverty in technical terms of Indian vernaculars and the absence of textbooks in the vernaculars appear to me insuperable barriers to the abandonment of English as a medium."

Mr. F. W. Südmersen, Principal of the Cotton College, Gaubati, writes in the same sense:—

"There is a very fundamental objection to the attempt to impart instruction in a college through the vernacular. Is it seriously contended that, in addition to the present difficulty of securing men in India to teach in our colleges, we are to impose further restrictions, and that our choice is to be limited to men who speak a particular vernacular? In such a case we may well postpone indefinitely any hope of securing university teaching except in certain areas where a moderate supply might be forthcoming. And are we to force an alien 'vernacular' upon large areas of India, where the vernacular has scarcely reached even a written stage?"

The Rev. Father Crohan, Principal of St. Xavier's College, writes:—

"In the first place, any other language [than English] seems impracticable where science subjects are concerned. The number of scientific books in the Indian vernaculars is small. Secondly, the use of another language would deprive the University of the services of some of its best men. Moreover, as university students have at their entrance to the University a rather poor knowledge of English, the chances of further improvement would be minimised."

Sister Mary Victoria, Principal of the Diocesan College for Girls, Calcutta, and the Rev. Dr. Watkins, Principal of the Rangpur College, express themselves in favour of the English medium, but without giving explicit reasons.¹ The Scottish Churches College

¹ Dr. Watkins would use the vernacular as the medium for teaching Sanskrit, Persian and the vernaculars.

Senatus do not reply categorically in regard to the question of university education, but as they desire that English should be the medium in secondary education it may perhaps be concluded that they are in favour of English as the university medium; their reply to Question 11 concludes thus:—

"The most important factor in any system of education is the teacher, and no system, however perfect in itself, can be more than partially successful, so long as the capacity, the training and the status of the teacher remain as they are. The knowledge of the pupil is just as faulty and incomplete when the vernacular is used as the medium of instruction as when English is used. The defects in the pupil's knowledge in any subject are due, not so much to the medium of instruction, as to faulty representation and bad teaching."¹

Mr. J. R. Barrow, Acting Principal of the Presidency College, says that if the teaching in schools were reasonably good he would see no reason why English should not be used as the medium of instruction in colleges. The reservation he makes is an important one, and we shall discuss the rest of his reply separately. Mr. R. N. Gilchrist, Principal of Krishnagar College, is in favour of the English medium, but regards the matter as mainly one for the people of Bengal themselves. "In my opinion," he says, "politically and educationally, English should be the medium. It is already the *lingua franca* of India."

61. Mr. Monahan in his evidence (see paragraph 35 above) suggested the advisability of a system of parallel educational institutions or of parallel classes in the same institution, with English and the vernacular as their respective media of instruction. The same suggestion is made in the evidence of Mr. Pramathanath Chatterjee, Second Inspector of Schools at Chinsura, of Mr. Jogendranath Bhattacharya, Head Master of the Hooghly Collegiate School at Chinsura and of Mr. Siti Kantha Vachaspati, Lecturer in the University Law College, Calcutta.² Mr. Chatterjee argues the case in considerable detail. He thinks that students who have pursued their studies in first grade training colleges in mathematics, history, science and psychology in their own vernaculars, and students who cannot pass the matriculation or I.A. examination in English, but who are strong in other

¹ Compare the reply of Rai Lalitmohan Chatterjee Bahadur, on the same lines, para. 62 above.

² See also paras. 70-72 below.

subjects, ought not to be debarred from university education, 'and doomed to a life of poverty and mediocrity.'¹ He continues:—

"If the intellectual resources of the country are to be fully utilised, it will be incumbent on the University to create a type of schools and colleges on a vernacular basis *with English as a second language and an optional subject*."

My scheme, which is in the rough, will be as follows:—

All high English schools in Bengal should be divided into two classes.

(i) *High English schools on a vernacular basis*, where English may be taught as a second language and an optional subject, and where the medium of instruction and of examination will be in the vernaculars of the country up to the highest class.

(ii) *High English schools on an English basis*, in which English will be taught as a compulsory subject of study throughout the school, and where the vernacular may be the medium of instruction and of examination up to the end of the primary department—English being taught as a compulsory second language. As regards the medium of instruction in other classes of the school, it may be a mixed system, both the vernacular and English being used to suit the capacities of the students; but the text-books prescribed for the school should be in English throughout, with the exception of those for the vernacular or a classical language.

It might also be possible to combine these two types of schools in one single high English school, if the necessary arrangements could be made for the efficient teaching of the two classes of pupils mentioned above.

Colleges for general education should similarly be divided into two classes, (i) colleges on a vernacular basis and (ii) colleges on an English basis.

In colleges on a vernacular basis, the medium of instruction and of examination should be the vernaculars of the country—English being taught as a second language and an optional subject. These colleges will be intended for those who come from high English schools on a vernacular basis, or from training schools, or who get plucked in English in the matriculation examination from high English schools on an English basis, but who desire to continue their studies in colleges. The college course may extend up to the B.A. or even up to the M.A. standard.

As for colleges for professional training, such as law, medicine, engineering, agriculture, commerce, technology and teaching, the medium of instruction should continue to be English, as before, but schools for professional training should be established in-suitable centres, all over the country, where the medium of instruction and of examination should as far as possible be the vernaculars of the country, and these schools will be open to those whose education has been conducted on a vernacular basis, in schools and colleges."

Mr. Chatterjee makes proposals similar to those advocated by Mr. Monahan in regard to the use of the vernaculars in certain

¹ Mr. J. M. Bose, Professor of Mathematics at Presidency College, estimates that about 20 per cent. of the students in muassal colleges give up their studies owing to their inability to follow the lectures; he adds that students unable to answer simple questions [in English] in the class-rooms often succeed in giving intelligent answers in Bengali.

branches of Government service. He thinks that his proposal, if given effect to, will not in any way affect the study of the English language in the public schools and colleges, for which there is a growing demand and predicts that—

"even though English be an optional subject in vernacular schools and colleges, a large majority of pupils, if not all, will learn English as a second language and will be able to employ it for all ordinary purposes of life."

62. Maharaja Kshaunish Chandra Ray Bahadur, of Krishnagar, suggests that only the brighter and more intelligent boys can both learn English and develop their ideas on other subjects. He thinks the comparatively dull students should have vernacular courses provided for them and that they should have a chance of shining in higher technical subjects such as medicine and engineering, and that for this purpose special vernacular courses should be provided for them, both at the pre-university and the university stages. In the arts department of the University he thinks the medium of instruction must necessarily be English.

V.—The medium of instruction and examination above the matriculation stage. Views of Muslim witnesses.

63. *The Muslim difficulties.*—As we explained earlier in this chapter the question of the medium of instruction cannot be approached without consideration of the special needs of the Musalmans who constitute more than half the population of Bengal although they form only a much smaller (but growing) fraction of the school and university population.¹ The difficulties felt by them, or on their behalf, are clearly explained in the statement furnished to us by the Muslim deputation in Calcutta in the passages which we quote below:²—

"We beg to draw your attention to the difficulty on account of the multiplicity of languages to which a Muhammadan student is put. A Muhammadan boy in Bengal is expected to know five languages—English, the court language, Arabic, the language of their religion, Persian, the language of Islamic culture, Urdu, the *lingua franca* of Muhammadans, and Bengali, the vernacular of the bulk of the population. This has engaged the attention of the Muhammadan leaders and they have come to the conclusion that though we cannot drop the study of any one of the five languages it is not necessary for every individual boy to study all of them. The Muhammadan boy whose mother

¹ See Chapter VI, paras. 34-36.

² See General Memoranda, page 211.

tongue is Bengali should receive his primary education in Bengali and should study a classical language, Arabic, Persian or Urdu....

Before expressing our opinion on the complicated question of the medium of instruction we should like to say that it is not altogether an academic question and before giving your judgment on this point it is absolutely necessary that the political controversies, not only in Bengal but in every other province in India during the last 40 years, should be carefully studied. The Muhammadans are convinced that the loss they have sustained in their legitimate share in the administration of the country was due to their apathy to English education and they support the recommendations of the Simla conference on secondary education held in May 1917. Any change in the existing system will be detrimental to the advancement of English education, the importance of which has been so lately realised by the Musalmans.

The introduction of Bengali as the medium of instruction and examination in the top classes of high schools and the universities will increase rather than lighten the burden of a Muhammadan boy, and will surely weaken his knowledge of English. As a Hindu boy improves his Bengali and enlarges his vocabulary by the study of Sanskrit, he will not find much difficulty in understanding the Sanskritised Bengali, which must necessarily be used in higher classes, and the Sanskrit technical terms. Of all the Indian languages Arabic and Sanskrit are the only languages which are adapted like Latin to frame derivative words from the same root for the different phases of the same thing. The technical terms in Bengali must necessarily be framed after the rules of Sanskrit conjugation and not after the rules of Latin conjugation, and hence it is idle to assert that the technical terms will be English.¹ The Muhammadan boy who will study Urdu, Persian or Arabic in place of Sanskrit, will not be in a position to follow the lectures in Bengali."

The Muslim deputation of Assam whom we received at Gauhati said :—

"With regard to the difficult question of the medium of instruction and examination in schools, we beg to submit that the present system has worked well, and we do not think that the conditions of the province are such as to justify the introduction of the vernaculars as media of instruction in the top-classes of the high schools."²

64. It would be a mistake to suppose that Muslim opinion is unanimous on these points ; it is, on the contrary, divided into at least three sections, as is shewn by the replies of our witnesses. Some are in agreement with the deputations just quoted ; others are in favour of using the vernacular as the medium (except, in some cases, for the teaching of English) ; a third party wish school boys and university students to have the option of using either

¹ It will be seen from para. 88 below that a large number of influential Hindu witnesses are in favour of using English and not Sanskrit technical terms.

² General Memoranda, page 208. None of the other Muslim deputations explicitly mentioned the medium of instruction. —

English or the vernacular as the medium and advocate a double system of teaching in schools and university institutions. We shall consider the evidence submitted on these three conceivable lines of policy.

65. Shams-ul-Ulama Abu Nasr Waheed, Principal of the Dacca Madrassah, puts the case urged by the Calcutta deputation in more detail, and perhaps more forcibly, than any other witness :—

“ English should be used as the medium of instruction and of examination in every stage above the matriculation in the university course for the following reasons :—

- (i) If the medium be not English it would be necessarily Bengali with a few exceptions. Now, Bengali, by genius and its vocabulary, is too poor to express high thoughts and ideas unless it is a sort of Sanskritised Bengali permeated with Sanskritic words, saturated with Sanskritic ideas and interwoven with Sanskritic structure, and Hindu myths almost out of recognition and with all the rigidity and stiffness of a dead language. Such Bengali is far from being the vernacular of the Presidency, not to speak of the Muhammadans who, in East Bengal particularly, use a sort of language commonly known as the ‘Musalmani Bengali,’ which consists of a large number of words of Arabic, Persian and Urdu origin. No Hindu, especially of West Bengal, will understand the Musalman *Pathis* and religious books written in this language. Besides, in East Bengal including Sylhet there is a veritable babel of tongues though a form of Bengali is commonly known to be used. A man of Dacca or Comilla, not to speak of West Bengal, can hardly understand the language used by a man of Chittagong or Noakhali or Sylhet, each with a different tongue.¹
- (ii) If such Bengali is adopted as the medium of instruction the Muhammadan students, especially of East Bengal, will be the greatest sufferers. They will be faced with the problem of learning and expressing their ideas in another language, which is a sort of Sanskrit, as stated above, with Persian or Arabic as their second language, while the Hindu boys, with Sanskrit as their second language, will have plain sailing. The multiplicity of languages which has already interfered, to a certain extent, with their progress will now heavily weight them in their race with their Hindu brethren. If most of them are either forced to give up Arabic or Persian in favour of Sanskrit as their second language, this

¹ Mr. Nibaran Chandra Bhattacharya (Question 1) also emphasises the difference between the speech of Eastern and of Western Bengal. “ I was listening,” he writes, “ to a Bengali address delivered by one of our most distinguished professors. His East Bengal accent and idioms were a torture to the ears of West Bengal men.” Mr. Bhattacharya thinks that university education in India cannot attain perfection until it can be imparted in the vernacular, but is opposed to giving too much attention to it at present.

will be regarded by the Muhammadans as a great menace to their national traditions and will constitute for them a source of dis-couragement from English education. I am, therefore, strongly of opinion that if Bengali is made the medium of instruction and examination the progress of Muhammadans in English education will be greatly retarded and receive a serious check.

(iii) Again, if Bengali is made the medium of instruction in the university course and English does not play a prominent part, the educated people of Bengal will be weak in communication with other intellectual centres in and outside India. This will narrow the basis of education, intellectual outlook and borders of knowledge, and will prevent free intellectual interchange. English is in the process of becoming the *lingua franca* of intellectual India and it would be a bad day for her, if this process is to receive a set-back."

Nawab Syed Nawabally Chaudhury adopts the same general line of argument; he adds that if a vernacular is used as the medium Bengal will be deprived of the services of British professors and of professors from other parts of India; and he wishes English to be used as a medium in the four highest classes of secondary schools. He objects to the compulsory teaching of the vernacular in the university course.¹

66. Maulvi Abdul Aziz, Lecturer on Arabic and Persian at Dacca College, emphasises in detail (a) the linguistic argument that the Sanskritised form of Bengali likely to result from the use of Bengali for the more difficult topics of the curriculum will be unintelligible to the Muslim boy who does not take Sanskrit as his classical language, and (b) the differences between the dialects of Eastern and Western Bengal. He thinks that English should be the medium of instruction from Class V upwards,² and that Musalmans should be given the option of selecting Urdu as their vernacular from that age. He states that the vernacular system, by compelling all Muslim boys to learn Bengali, mostly under the Hindu teachers, has so greatly changed their ideas, not to speak of their manners and customs, that an official note from an Assistant Inspector of the Dacca division to the Special Assistant Director of Public Instruction in Bengal stated that he 'found about fifty per cent. of Muslim boys in secondary schools believing in the transmigration of the soul.' He goes on to make the assertion (which it would perhaps be difficult to justify) that those

¹ Answers to Questions 1, 4 and 11.

² Chapter XXI, para. 4.

Musalmans who advocate that Bengali should be the medium for all pupils in secondary schools, Hindus and Musalmans alike—

" are those who have very little concern with Islam and Islamic learning ; their ignorance of Arabic and Persian and ignorance of the internal desires of the Muslim public, coupled with their inexperience, have disabled them to see through the far reaching consequences, economical, social, moral and religious, of the so-called vernacular system."

67. Syed Abdul Latif, Khan Sahib, Sardar Sub-Divisional Officer, Dacca, writes :—

" English should be the medium of instruction at every stage above the university course. The present advancement of India is due to the teaching of English. English has grown into a cosmopolitan language, and has a unifying influence in the British Empire. People now learn this language with as much ease as they learn their own vernaculars. In many educated families English has become, as it were, a part of their mother tongue. But nevertheless it is true that the teaching of English has very much deteriorated. The old method of teaching this language under which English scholars like Lal Behari Dey, Sumbhu Chandra Mukerjee, and Sasi Dutt were produced, should be restored. It should be taught as a Foreign language. . . . The matriculation examination should be conducted in all subjects, except history and science, in the English language. In the University, teaching in all subjects should be in English, with the provision that those who like may answer questions in history and science in their own vernaculars."

Khan Bahadur Maulvi Ahsanullah, Additional Inspector of Schools, Presidency Division, thinks that in a country where teaching suffers from the domination of examinations the displacement of English as the medium of examinations would have a serious effect on the study of English ; that English should not only be employed as the medium for colleges, but that it should be introduced as a medium in the 'middle stage' of secondary schools and used entirely in the high stage, and that 'any ill-advised attempt to uproot English from its present position will have a disastrous effect not only upon the study of English but also in the study of the vernacular.'¹ Maulvi A. K. Fazlul Huq and Maulvi Mohammad Irfan, who share the same general view as the witness just quoted, also wish that English should be used as the medium at an even earlier age in the schools than at present.²

¹ The evidence of this witness is more fully quoted in Chapter IX, para. 74.

² The other Muslim witnesses who are uncompromising in their advocacy of English as the sole medium for the upper classes of schools as well as for the universities are :— Khan Bahadur Taslimuddin Ahmed ; Mr. Sayyad Muhsin Ali, Assistant Inspector of Schools for Muhammadan Education, Chittagong Division ; Mr. Altaf Ali ; Nawab Syed Nawabally Chaudhury, Khan Bahadur ; Khan Sahib Maulvi Kazi

68. Mr. A. H. Harley, Principal of the Calcutta Madrassah, ought, we think, to be included among those who represent various categories of Muslim opinion. Writing in conjunction with Khan Bahadur Aminul Islam, a Member of the Governing Body of the Madrassah, and supported by Khan Sahib Maulvi Mohammad Yusuf, the Head Master of the Anglo-Persian Department of the Madrassah, he puts a somewhat less conservative point of view than the witnesses first quoted.

"The problem of the vernaculars in Bengal (he writes) concerns itself with Bengali and Urdu only. Bengali being the chief vernacular of the province a foreign student would be obliged to learn it as a preliminary to his understanding the lectures were it the medium of instruction. Urdu is the *lingua franca* of India and further has pride of place in the affections of the Muhammadans of the large towns particularly, but now that the Muhammadans of villages have entered the ranks of students it seems likely that Bengali will come to occupy a larger place among educated Muhammadans, especially as it is strongly felt in some quarters that it is needed in ordinary competition with the Hindus. At the same time those Muhammadans of the province who cling to Urdu and refuse to learn Bengali are numerous enough to require that for some time to come at least education in Calcutta University should be through the medium of English and in the circumstances I am obliged to represent that English should remain the medium."

69. On the other hand Mr. Mohamed Habibur Rahman Khan, Honorary Joint Secretary of the All-India Muhammadan Educational Conference, and Mr. Syed Ross Masood of the Indian Educational Service, formerly Fellow of Calcutta University and now Director of Public Instruction in Hyderabad write, (in identical terms):—

"The medium of instruction both in schools and universities should be the vernacular of the province. Without this our life and mode of thought become more artificial and superficial than they need be. India will never develop her real genius and intellectual life till it is made possible for the inhabitants of the country to acquire all varieties of knowledge in the language which comes to them most naturally; and this they will never be able to do as long as English is allowed to remain the only language of culture in the land. Meanwhile, English should be taught as a compulsory language both in the schools and in the universities."

Nawab Nasirul Mamalek Ali, Mirza Shujaat, writes in the same sense. Maulvi Tassadduq Ahmed, Assistant Inspector of

Schools for Muhammadan Education, Burdwan Division, echoing the views of many other influential witnesses whom we have quoted, writes—

“in secondary schools the medium of instruction should throughout be the vernacular of the country, English being taught as a compulsory second language. I advocate this change on the ground that the school, according to my scheme, will be the training ground for all, and what is most needed is accuracy, precision and facility in expression. The habit of thinking is to be cultivated in this training ground, and this habit, as well as the accuracy and precision sought after, can only be attained by allowing the boys to think in their mother tongue. The plea that the teaching of English will suffer if this proposal be accepted is based on a very narrow view of a boy's intellectual equipment.”

Kazi Imdadul Huque, Head of the Calcutta Training School, Mr. Abdul Hashem Khan, Assistant Inspector of Schools in the Burdwan Division, and Mr. A. F. M. Abdul Kadir, Professor of Persian at Ravenshaw College, Cuttack, think that in secondary schools the vernacular should be the medium of instruction for everything except the teaching of English. Mr. Kadir says “the real bane of the present system of university education is the fact that English is the medium of instruction and examination at every stage;” he belongs to the school of those who think that the time saved by using the vernacular as the medium might be employed profitably for English, and that the standard of English teaching would be raised in this way. Again, Mr. Fazli Husain, writing from Lahore, urges the view which he advocated at the Simla conference of August 1917 (see paragraph 23 above) namely that English should be used as a medium in secondary schools only for technicalities; and this view is supported by Mr. Abdul Jalil, Assistant Professor of Physics and Superintendent of the Muslim Hostel at Meerut.

70. A third category of Muslim opinion is in favour of giving the option to Muslim students and others of either using the vernacular as the medium or English, by providing the two kinds of instruction in the same institution or by the establishment of separate institutions (see paragraph 61 above). Mr. Khabiruddin Ahmad would have English as the medium of instruction in secondary schools for those likely to proceed to the university or join the bar, and the vernacular in the rest. Maulvi Abdul Karim, Honorary Fellow of the Calcutta University, and a well known authority on education, is in favour of English as the university

medium but thinks that in schools the medium of instruction should be the vernacular for all students up to Class VI and that only those students preparing for the matriculation should have, from Class VII upwards, the option of learning a subject through the medium of the vernacular or English; he would give boys the option of being examined through the vernacular at matriculation in all subjects but English. Maulvi Khairuddin Ahmed, Assistant Inspector of Schools for Muhammadan Education, Dacca Division, thinks an attempt should be made to replace English by the vernacular but that in view of the existence of five vernaculars in Bengal there should be colleges, preferably the Government colleges, teaching through English.

71. Mr. M. A. N. Hydari,¹ President of the All-India Muhammadan Educational Conference in 1917, gives his powerful support to a similar plan, putting in however a special plea for the claims of Urdu.

"I would have," he writes, "the vernacular as the medium of instruction in high schools and colleges up to the B.A. At the same time I want to note most emphatically that if English is given up as a medium of instruction it should be always and invariably open for Muhammadan students to have Urdu as the medium of instruction, and in all Government colleges and in the University the Urdu side should be as fully equipped as the other vernacular sides; if this for any reason is not possible, it is absolutely necessary in the interests of Muhammadan students that English should continue to be the medium of instruction."

In regard to the relative claims of Urdu and Bengali as a medium of instruction in Bengal, Maulvi Abdul Karim,² in his presidential address to the Bengal Provincial Muhammadan Educational Conference held at Burdwan in 1916, said—

"I am afraid the progress of Muhammadan education in Bengal has been much retarded by the unhappy choice of the medium of instruction. I have already said how keen I was at one time about having Urdu prescribed as the medium of primary education for Muhammadan boys in Bengal, and how subsequently I had to change my opinion. The mother tongue of most of the Musalmans in Bengal (a microscopic minority in such towns as Calcutta, Murshidabad and Dacca excepted) is Bengali, while Urdu is to all intents and purposes a foreign language to them. As Muhammadan boys of Bengal find it difficult to learn Urdu, as a rule they take up Bengali as their vernacular subject in the university examinations, even when they have got the option of taking up Urdu. This may be verified by a reference to the records of the Calcutta University."

¹ The evidence of this witness is quoted more fully in Chapter IX, para 77.

² To whose views we have already referred in para 70 above.

be taught through them with a great saving of time and labour. He continues :—

“ But, side by side with this and other similar considerations, it should not be forgotten that the English language and its magnificent literature have done more to expand the Indian mind during the last 50 or 60 years than any one thing else to which the renaissance, which is visible in every department of Indian life, could be attributed. The vernaculars, however beautiful and necessary in themselves and however much capable of fresh developments, are, at the highest, merely provincial. While in some provinces there is a multiplicity of vernaculars the English language is the one language common to all the provinces. It has served as a great bond of unity in this country. In the future it is destined to bind India in closer ties with the other parts of the British Empire, Great Britain and the Colonies alike. A training in the English language is not merely necessary on Indian national grounds, but also in view of the high destiny that seems to be unfolding in the near future.”

73. It will be seen that the competent and distinguished Muslim witnesses who have favoured us with their views include almost every school of thought in regard to this matter, each party thinking no doubt that its own proposals would tend to the greatest educational benefit of the Muslim community as well as of the province generally. We shall deal further with this question in making our recommendations in Part II.

VI.—The question of medium in Assam and Burma.

74. Assam, with its population of 7,000,000, and its very numerous languages, and Burma, with its population of over 12,000,000, need separate consideration. Mr. J. R. Cunningham, Director of Public Instruction for Assam, who regards the issues as largely political, but does not touch on that side of the question, writes :—

“ So far as Assam is concerned the answer must be in favour of English. We have Bengali as the ruling language in the Surma Valley, Assamese in the Assam Valley and between them the Hills where many languages are spoken. The Hills need English—nor can their needs be disregarded—they are pushing forward in education, a Khasi stood lately as the head of the university honours list in philosophy, another stood at the head of the list of the Technical Examination Board. In all there are reckoned about 160 languages in Assam. In Assam—I should regard it as being the same in India as a whole—the simplification of the complexity of languages should be a cardinal part of our educational policy. Assam will not accept the language of Bengal, the Hills the language of the Plains. The adoption even of a general alphabet is neglected by inertia or retarded by local patriotism. English for all is common ground and for all affords the widest hope of profit and enlightenment. With the spread of education amongst women the increase of the

literate in English returning to their villages to find employment, the general introduction of English into village schools, the prospect is clear, even if it be remote, of English as a living language in India, understood in the fields and spoken in the village streets.

I should not favour any measure of change which would tend to obscure the supreme importance of the study and use of the English language."

Mr. Cunningham would like English to be used as a medium of instruction from a very early stage, if an adequate supply of teachers could be found. He thinks the Government should provide better salaries for teachers, and the universities better training for them. The present teachers are, in his judgment, inexpert. He adds :—

" For the rest children should read more, and less narrowly, write less and more correctly, and speak very much more without having it considered too carefully whether what they say is grammatically expressed so long as they speak easily and get their meaning clear. They should speak English not only to the teachers but in the hostels and on the playground."

Mr. Cunningham advocates systematic teaching of English throughout the degree course, both in arts and science.

75. Mr. C. M. Webb, Secretary to the Government of Burma, Educational Department, writes :—

" In Burma for many years English must be the medium of instruction and examination at every stage above the matriculation in the university course. Vernacular education tails off rapidly as soon as the primary stage of education is passed. There is a comparatively small demand for vernacular middle and high school education. There would be but few pupils prepared to take a vernacular university course, no vernacular text books for such a course, and few or no teachers capable of conducting such a course."

The opinion seems decisive, and the evidence of Mr. S. W. Cocks, the Acting Director of Public Instruction in Burma, and of Mr. Taw Sein Ko, Superintendent of the Archaeological Survey, Burma Circle, the other two witnesses from Burma who have replied to Question 11; is in accord with it.¹

It appears from the evidence of Mr. Cocks that English is used as a medium in the Burmese schools at an earlier stage than in Bengal, being the chief medium in the highest class of the middle school, and the medium in which the school examination at the end of that stage is conducted in all subjects except the vernacular. Nevertheless the three witnesses quoted state that the knowledge of English at the matriculation stage is in most cases inadequate. Mr. Cocks and Mr. Ko criticise the present teaching in the secondary

¹ Mr. Mark Hunter, the recently appointed Director of Public Instruction in Burma, was Professor at the Presidency College, Madras, when he replied to our questionnaire.

schools, and advocate the use of more conversation as well as other changes. Mr. Webb wishes the English medium to be used by students preparing for matriculation from Standard V upwards and Mr. Ko advocates the use of English as the medium for all subjects if possible throughout the secondary course, though he is prepared to except mathematics and geography. Mr. Cocks thinks that English should be taught to all students during their university course, with a more practical curriculum for those whose course of study is scientific or mathematical rather than scientific; but he believes that if and when the first two years of the university course are transferred to schools, the teaching of English to all students will cease to be essential. The subject of teaching in Burma does not come strictly within our province and a closer enquiry would be necessary before any final conclusions could be arrived at in regard to the questions at issue. For more detailed information in regard to the views of the above-named witnesses reference must be made to the evidence.

VII.—Question of the medium to be used below the matriculation stage.

76. It would be premature at this point to attempt a comprehensive sketch of the issues raised, but it will conveniently narrow the field of discussion in dealing with the question of the medium below the matriculation stage if we can arrive at some provisional conclusion as to the medium which should be used above that stage.

77. The advocates of the use of Bengali as the university medium, eventually or immediately, are able, enthusiastic and persuasive; but the figures quoted in paragraph 26 show in the first place that they are in a minority; and, in the second place, that only a fraction of that minority think that any great change could be made for a considerable time, owing to the still existing deficiencies of the vernacular. From the figures quoted and a perusal of the evidence we believe that not less than eleven out of every twelve of our witnesses would hold that under present conditions every boy intended for a university career should at the matriculation stage be able to read English text-books with ease and to listen intelligently to teaching in English, even though he might be unable to do himself full justice at that stage in answering examination

papers in English ; and that, two years later—that is at the present intermediate stage, (which we regard as the termination of higher secondary education)¹—he should be able to express himself clearly and accurately and to answer examination papers in English without difficulty. Many, no doubt, would put the requirements at the present matriculation stage somewhat higher. But we have purposely stated the proposition in the form in which it will command, we think, the fullest measure of assent. As to the immediate attempt to use the vernacular as the university medium above the present intermediate stage, we believe that it would not only be impracticable, but would meet with almost universal and determined opposition both from university teachers and the public alike. In saying this, we do not wish in any way to prejudge at this point the general question of the future, which we shall discuss later. But we may say at once that the requirements in regard to the mastery of the vernacular used by each student as his mother tongue should certainly not be less—we think they should be greater—than those in regard to English ; and we have in mind especially Bengali which is the main vernacular of the province for Hindus and Musalmans alike.

78. How then shall this double aim, the aim in regard to English and the aim in regard to the vernacular, be achieved ? We have adduced in Chapter IX abundant evidence of the almost universal dissatisfaction with the present teaching of English. The question was not explicitly raised in our questionnaire, but there are indications in the evidence that there is almost equal dissatisfaction with the teaching of the mother tongue, and this dissatisfaction was expressed to us on many occasions during our tours in Bengal. How can matters be improved in both respects ? We may say at the outset that we believe that the conflict between the two aims is rather apparent than real : and that experience in many countries shows that the mastery of the mother tongue is not rendered slower or less difficult by the acquisition during school years of a second living language. We shall therefore regard the two aims which we have specified as equally necessary, and shall deal first with what is obviously the more difficult of achievement, the aim in regard to English, and shall consider that for the moment, and, as far as possible, independently of the second aim.

¹ See Chapters XXXI and XXXII.

81. It is right before proceeding further to point out that a certain number of our witnesses deny that any instruction is at present actually given through English. Thus Mr. F. W. Südmer-son writes :—

“ Although instruction is supposed to be through the medium of English in the top four classes of a high school, whatever instruction is given, excepting of course the mechanical reading of text-books, is really in the vernacular.”

The Scottish Churches Senatus say that “ English is taught in most cases as a dead language, little practice being given in the speaking of the language.” And according to Dr. Nares Chandra Sen Gupta, “ most teachers in secondary schools do, as a matter of fact, use the vernacular as the medium of instruction.”

82. No doubt these witnesses speak of schools with which they are acquainted. But the evidence of three inspectors of schools shows that in most schools a mixture of the two media is used, as one would expect. Khan Bahadur Ahsanullah says that “ the vernacular is not displaced as a medium at any point of school life. Teachers use the vernacular freely even in the highest classes.” Mr. W. E. Griffith, Inspector of Schools in the Burdwan Division, writes :—

“ English should be used as the medium of instruction in all subjects for those students who are being prepared for the matriculation. This is the present system. It is true that much of the teaching is imparted by means of an admixture of English and Bengali; but this would cease and English would gradually predominate as better qualified teachers were provided.”

Mr. T. O. D. Dunn, Inspector of Schools in the Presidency Division, writes that the extent of the use of English as a medium varies as follows :—

“ (1) Schools under missionary control with European teachers are able to use English as the medium of instruction at a stage four years before matriculation. The senior classes of these schools may reasonably be described as bi-lingual. At present the best of them are girls’ schools with several European teachers.

(2) The better schools staffed solely by Indians—Government high schools and certain privately managed institutions—have not yet attained to this standard. English, two years from matriculation, is scarcely a complete medium of instruction, and cannot be considered so even in the final year of school work.

(3) The average ‘ recognised ’ school does not attain at any stage to the free use of English as a medium of instruction.”

We have received complaints that teachers use English unduly in order to exercise themselves in conversational practice, even when their pupils cannot follow them.¹

83. The fact is that the practice varies from school to school and from teacher to teacher. We have ourselves heard instruction, with varied competence and success, given in many schools in history, mathematics and Sanskrit through the medium of English. It is certain that an effort, if not always a successful effort, is made to use English as the spoken medium in the four highest classes. We cannot therefore accept the view that criticisms of our witnesses in regard to the use of English as the medium are criticisms of an imaginary system ; they are probably most applicable to those cases in which the teacher's mastery of the medium is least perfect. And above all it must be remembered that, whatever variations there may be in the use of the spoken medium, the written medium for the matriculation, and for the test examination which precedes it, is English,² and that boys will have no chance of passing it unless they can use that medium to some extent.

84. An inspection of the answers to section (ii) (b) of Question 11—"To what extent do you think that English should be used as the medium of instruction for those students who are being prepared for matriculation"—shows a variety of opinion that escapes anything like complete classification, even among those witnesses who are most ardent in their desire to maintain English as the sole medium at the post-matriculation stages.

85. We quote first witnesses in favour of the English medium as the chief medium at any rate for the upper classes of the school. The Rev. W. H. G. Holmes thinks that if English is to be used as the medium of instruction in the University it should be used at the earliest possible moment in the schools. Maulvi A. K. Fazlul Huq from his personal experience desires a reversion to the older state of things. He would have the medium of instruction gradually introduced so that when the boy reaches the first of the four highest classes in the school (Class VII) the medium should be wholly English. Sister Mary Victoria, on the other hand, who has had great experience with girls, and who advocates English as the medium for the four years preceding matriculation, thinks

¹ See the evidence of Mr. H. Sharp quoted in para. 91 below.

² Except for history, an optional subject, for which the use of the vernacular may be substituted at the choice of the candidate.

"it should never be used as a medium of instruction below twelve years of age" except for pupils whose vernacular is English. Mr. A. H. Mackenzie, Principal of the Government Training College, Allahabad, who is one of the strongest advocates of the English medium, would limit it to "those classes in which the instruction necessitates the use of a vocabulary richer than that familiar to the pupils in the speaking and reading of their vernaculars"—in his opinion the two highest classes of the secondary school as at present organised.

Mr. Chinta Haran Chakravarti, Officiating Principal of the David Hare Training College, thinks that English should be the medium for students preparing for matriculation in teaching all subjects, except the vernacular and classical languages, but that free use should be made of the vernacular to explain difficulties wherever necessary to ensure an accurate understanding of the subject; but he does not specify from which class he would begin using it. Other witnesses specify various classes in the school as the proper stage at which the use of the English medium should be adopted, from Class IV up to Class IX.¹

86. We have quoted in the foregoing paragraph certain witnesses who though generally in favour of English as the school medium from a certain stage in the curriculum think that the classical languages and the vernacular should be taught through the medium of the vernacular, for which course strong reasons are adduced.

¹ The following is a list of classes recommended by various other witnesses as the lowest suitable for the use of English as the medium of instruction:—

Class IV, Mr. J. R. Banerjee and Mr. Satyendranath Gupta, Officiating Head Master of the Howrah Zilla School; Class V, Mr. W. E. Griffith; Class VI, Mr. Govinda Chandra Bhowa; Class VII, Mr. Altaf Ali, Mr. Saiyad Muhsin Ali, Rai P. K. Basu Bahadur, Rai Sahib Nritya Gopal Chaki, Mr. G. E. Fawcous, Mr. Haridas Goswamy, Mr. U. C. Haldar, Khan Sahib Maulvi Kazi Zahiral Haq, Mr. A. H. Harley, Mr. Panchanan Majumdar, Class VIII, Mr. Gauranganath Banerjee, Mr. Jaygopal Banerjee (except for geography and history), Dr. Bimal Chandra Ghosh, Mr. U. C. Gupta, Mr. C. H. Mazumdar, Mr. Khudi Ram Bose; Class IX, Mr. Sudhansukumar Banerjee, Rai Sahib Bidhubhusan Goswami, the Maharaja dhiraja Bahadur of Burdwan, Dr. Wali Mohammad, Mr. Panchenandas Mukherji, Mr. P. N. Nag, Mr. Bipinbehari Sen Dr. P. D. Shastri. The above list is not complete. In some cases witnesses recommend the instruction of English from the '3rd class' and it is not clear whether they mean Class III or Class VIII. In a number of cases no class is mentioned and it may be assumed that the witnesses are in favour of the *status quo*, i.e., of using English as the medium from Class VII to Class X inclusive. A certain number of witnesses named above would use the vernacular as the medium in teaching the vernacular itself and the classical languages. We use in this note the classification of the Eastern Bengal schools, see first footnote to para. 2 above.

Thus Mr. T. O. D. Dunn writes:—

"Translation from Sanskrit should be carried on in Bengali. This is only fair to the pupil and the only means of attaining to a scholarly and analytic knowledge of the mother tongue and the correction of the hideous evil of the 'key' by which a boy translates his Sanskrit into the vilest kind of English."¹

87. But apart from these witnesses there are a considerable number who advocate a mixed system, under which some non-linguistic subjects would be taught through the English, and others through the vernacular, medium. In regard to this division there are very wide divergencies of opinion between individual witnesses.

88. A number of witnesses suggest that geography and elementary science should be taught in the vernacular. A serious difficulty is of course the question of technical terms. The vernaculars have not the resources either in vocabulary or in methods of formation to frame such terms and if the vernacular is used as the medium they must be formed with the help of Sanskrit or Arabic, or borrowed direct from English. Sir Gooroo Dass Banerjee would borrow them from English; Rai Dinanath Biswas Bahadur goes further, and suggests, with a view to enriching the vernacular, that both English and vernacular technical terms should be used; and he proposes that in teaching geography the names of mountains, rivers, lakes, etc., in India should be given both in English and the vernacular, other names being given only in English. Some witnesses, like Miss L. Sorabji of Dacca, think that geography and science should be taught through English as early as possible, while Mr. P. C. Singh advocates the teaching of geography and hygiene in the vernacular. In regard to history there is a marked difference of opinion. Rai Chuni Lal Bose

¹ Other witnesses who share Mr. Dunn's general view that English should not be used as the medium for teaching classical languages and the vernacular are Mr. Sharp, Mr. J. R. Banerjee, Mr. Chintu Haran Chakravarti, Mr. P. K. Chatterjee, Rai Sahib Bidhubhusan Goswami, Professor of Sanskrit at Dacca College, Mr. Haridas Goswamy, Mr. J. N. Hazra, Mr. Amvika Charan Mazumdar, Dr. Tej Bahadur Sapru, Mr. Akshaykumar Sarkar, the Rev. T. E. T. Shore, Dr. David Thomson, Rai Bahadur Bhagvati Sahay (who would use the classical language as the medium in teaching it). Conversely, the great majority of the witnesses who are in favour of using the vernacular as the general medium in secondary schools would use the English medium for the teaching of English.

Bahadur, the Rev. J. C. Forrester, Dr. M. N. Banerjee, Mr. J. Borooah, Rai Hari Nath Ghosh Bahadur, Mr. R. K. Guha, Mr. J. N. Hazra, Principal of Midnapore College, suggest history as a subject which should be taught in the vernacular. Other witnesses, Rai Bejoy Narayan Kundu Bahadur, Rai Biswambar Ray Bahadur, Rai Sri Nath Roy Bahadur, specially mention history as a subject which should be taught in English. Yet other witnesses again, Mr. Jay Gopal Banerjee and Mr. P. C. Singh, suggest a differentiation of treatment as between Indian history, which they wish taught through the vernacular, and English history which they would have taught through English.

89. The case of mathematics is peculiar, as the subject is expressed almost completely by the use of technical terms combined with a few of the simplest elements of ordinary speech. Nevertheless a number of witnesses in favour of the divided system select mathematics as a subject to be taught in the vernacular. Rai Dinanath Biswas Bahadur, Mr. Herambachandra Maitra suggest that the medium should be vernacular with English terminology. Mr. Karunamay Khastgir, Professor of Mathematics in Presidency College, Mr. Bimalananda Sen, of the Noakhila P. N. High School, Bogra, and Mr. U. N. Sinha, Principal of the Cooch Behar College, select mathematics as a subject for which the English medium should be used.

90. Another witness who advocates a mixed system in the schools is Mr. J. G. Covernton, Director of Public Instruction in Bombay. Mr. Covernton thinks the arguments for maintaining English as the medium of instruction at every stage above entrance to the university preponderate if Indian universities are to be brought up to modern standards of method and efficiency and kept in touch with European learning and progress. He writes :—

" At present it is quite true that students on entering the university have a very inadequate knowledge of English and are mostly unable to understand English as spoken by Englishmen or themselves to speak ordinary English such as is used by Englishmen in everyday life. But if the school course were lengthened and improved, and the boys came to the university older and with a more thorough school training, these defects would be removed and the students should then be more able to cope in English with their university work. It does not follow that in schools all work should be carried on through the medium of English, provided that ample time is given to English, and especially to practical forms of English, e.g., dictation, reading and colloquial conversation, all of which at present are far too much neglected in the upper classes of our secondary schools. History and geography are probably

the subjects in which the use of vernaculars as a medium of instruction in schools may be permitted with the least detriment to the pupils. In teaching oriental classics, e.g., Sanskrit, Pali, Persian, there may be possible advantages to be gained by using the vernacular. The adoption of the vernacular in the subjects named above would, I think, promote more rapid progress in them and would probably afford more time for the study of English and all those subjects which are to be taught through English. University candidates should be allowed the option of answering papers in the former subjects in vernacular."

Thus Mr. Covernton thinks the mixed system would be educationally economical.

91. Mr. H. Sharp, Educational Commissioner with the Government of India, proposes an interesting scheme for the gradual introduction of English as the medium which even in the highest school class would not be the only medium. He writes:—

"The use (or attempted use) of English as the medium of instruction begins too early. This is due to the facts that the tendency in Bengal is to begin English at a very early stage before the pupil has attained an adequate knowledge of his vernacular, that the classes which are designated 'high' comprise the last four classes, and (I am informed in some quarters) that teachers like to practise their English in class. The instruction should be imparted in vernacular (or mainly so), and the books used should be vernacular up to a higher stage than at present. The introduction of English as the medium should be gradual, e.g., English as a language might be begun about the third or fourth stage of instruction, the medium remaining vernacular, save where the direct method is used and even then only in lessons in English. At about the sixth stage, arithmetic might be worked in English figures. At the sixth, English technical terms would be introduced in mathematics. At the seventh stage, instruction in mathematics would be conducted so far as possible in English and a history book in English would be read, covering the same period as that read in the sixth, and couched in language which approximated to a translation of the book used in the sixth; but the explanation in class would remain mainly vernacular. In the eighth stage, history teaching would be conducted in English so far as possible, and an English geography book would be used in the same way as was the history book in the seventh standard. In the ninth stage geography would be taught in English. In the tenth stage instruction would be carried on mainly in English save in the vernacular and classical language lessons. I have not mentioned science, because the treatment will depend on the stage at which it is begun. If it begins early, the same method of gradual change might be adopted as with history and geography; if late, commencement might be made with an English science book, the explanation being at first in the vernacular and then in English."

92. The evidence of Mr. F. C. Turner, Principal of Dacca College, marks a transition between witnesses who are either in favour of English as the chief medium, or as the partial medium,

and those who advocate the vernacular as the chief medium in the high schools. He writes :—

“(a) I consider that at most 20 per cent. of students have on their entrance to the University an adequate command of English.

(b) It is difficult to form a definite opinion on this point, but I am inclined to be sceptical as to the amount of English acquired by pupils in schools by studying subjects other than English through the medium of English, and I am doubtful whether the benefit to their English is not more than balanced by the loss to their other subjects.

(c) I am anything but satisfied with the kind of training now given in English before entrance to the University....

(d) No attempt should be made to teach English literature until after the intermediate stage, and then only to honours students. There should be no poetry set either for the matriculation or for the intermediate examination. To introduce students either to poetry or to archaic forms of English before they have a sound knowledge of current prose is, I am convinced, at the bottom of all our difficulties in teaching English.

(e) It follows from my answer to (b) above that I am inclined to permit students to give their answers in all subjects (at the matriculation) except English in the vernacular.”

93. Mr. J. R. Barrow, Professor of English and Acting Principal, Presidency College, whose admirable evidence should be consulted *in extenso*, thinks that the present system in the secondary schools by which all instruction after the elementary stage is given through the medium of an alien tongue, ‘has failed hopelessly.’

“If,” he says, “such a system has succeeded elsewhere, then that only proves that the system is one which entirely depends for its success on the conditions under which it is worked and the skill of those who work it, and that here the necessary conditions and skill are lacking. The experiment is in itself an extremely daring one, since at the best it means that boys are having the foundations of their knowledge of other subjects laid insecurely; while, at the worst, as in Bengal, not only are the foundations imperfect, but the whole superstructure is rickety. This surely would be an unconscionable price to pay even if at the end of the school course all students had at least learnt English really well. But if we find, as we do, that the system to which so much is sacrificed does not even teach them English it seems to me ruinous to stick to it.”

(1) Mr. Barrow doubts whether much can be done to improve pronunciation and intonation except in a few details and thinks (with Dr. Seal) that it is easy to exaggerate the importance of this matter, since every branch of the British Empire has its own peculiarities of speech; (2) he urges that it is essential to increase the stock of words known to the Bengali boy and that the very first thing to improve the teaching of English in schools is to increase very largely the amount, not the difficulty, of the English read; (3) he thinks the whole process of learning is inverted by the introduction of grammar—and especially grammars ‘full of preposterously long and

difficult terms', although a few simple rules of grammar may be useful to the beginner; (4) he points out that by introducing boys to literature before they have a strong and easy grasp of modern English and by thus pressing on their attention the obsolete and the unusual we cause inevitable confusion, and their stock of words and phrases becomes a jumble of old and new, common and rare, poetical and prosaic, which is so often caricatured as characteristic of Indian English; (5) he regards it as a complete waste of time to set boys to read literature before they have acquired the familiarity with the language necessary to appreciate it; and that it is an example of the topsyturviness of present methods that boys are examined—and pass—in prosody, at the intermediate examination, when the ear is unable to distinguish the movement of blank verse from prose; (6) he sees no object in using English as the medium of examination at matriculation, though there would be no great objection to it, if boys by the use of better methods acquired a really good knowledge of it before they left school. Mr. Barrow finally insists on the importance of providing every school and every college with a supply of light English reading. "The tendency to force 'standard books' down the throats of immature students is, quite apart from the difficulties of language involved, responsible for much of the intellectual sterilisation which every one deplores."

94. The staff of Serampore College, who are in favour of English as the sole post-matriculation medium, write:—

"Almost all members of our staff are of opinion that it is desirable to give a fair trial to the vernacular as the medium of instruction in all subjects except English, in secondary schools up to the matriculation standard, but only on the distinct condition that better arrangements of a radical character are made for improving the teaching of English as a subject. From the lowest to the highest classes only a fully qualified staff for English teaching should be employed. At present great harm is done by assigning the teaching of English in the lowest classes to teachers who themselves do not know the language."

95. Mr. J. A. Richey, Director of Public Instruction in the Punjab, in an admirable memorandum, too long for complete quotation here, after expressing his view that English should be used as the post-matriculation medium, writes:—

"I consider that the present extensive use of English as a medium of instruction in secondary schools can only be justified if the following two propositions are accepted as true:—

- (i) that the use of English as a medium of instruction in subjects other than the English language improves the student's command of English;
- (ii) that before a boy can study a subject in college through the medium of English he must have been trained to think in English on that subject in school.

I hold that neither of these propositions is true. (i) That the first proposition is a fallacy can be practically demonstrated by a visit to any high school in India. Speaker after speaker at a conference recently held in Lahore emphasised this point, i.e. that the use of English as a medium

before a boy has a good working knowledge of English results either in verbal cram or in slipshod English.

(ii) The second proposition is based on a psychological or, perhaps I should say, physiological fallacy. Given a good knowledge of a language it is perfectly possible for a man to express his thoughts in it on any subject which he has studied in his mother tongue. I never found any great difficulty in expressing my thoughts on history, politics, etc., to a Frenchman in French although I had never studied these subjects through the medium of French.

The aim of the secondary school (regarded as a preparatory for a university) should be to educate its pupils intelligently up to the standard required for university study, and to give them such a thorough knowledge of the English tongue as will enable them to undertake that study through the medium of English. By attempting prematurely to make its pupils study in English it fails to educate them intelligently. It should be quite possible for the Indian secondary school to achieve its aim if it attacked the problem in the proper way.

All subjects of the school curriculum (save the English language itself) should be taught through the medium of the vernacular. At the same time the teaching of English in the higher forms should be revised and brought into co-relation with the rest of the school course. The object of the English teaching should be to enable boys to understand and to express themselves in straightforward modern English.

The study of general subjects through the medium of the vernacular will set free a good deal of time now wasted in re-learning through the medium of English courses which have been learnt in lower classes through the vernacular; and these additional periods may well be assigned to the English master. An exception might be made in the case of mathematics which might be taught in English in the highest forms, since in this subject the technical terms used are already English and the need for composing grammatical sentences is almost negligible.

. The duty of the school is to teach modern colloquial English and, so far as possible, to make the pupils bi-lingual. There should be much more talking on the part of the boys and less by the teacher than there is at present. Incidentally this can only be brought about by the provision of teachers who have been trained at normal colleges in modern methods of language teaching. India, and particularly Bengal, is woefully deficient in such institutions.

If English were taught on the above lines it should be possible for a boy to answer his papers at the matriculation stage in English in subjects which he has studied through the medium of the vernacular; but there is no advantage gained in making him do so except where necessary.

I look on external examinations solely as entrance tests to further spheres of work or employment. They add nothing to the knowledge a boy already possesses. Regarded in this light, it is for the future employer or instructor to state what qualifications he desires in candidates and to devise his test accordingly.

It may be urged in objection that the option of answering papers in the vernacular already exists at the matriculation and is little used. The reply is that the subjects having been taught through the medium of

English at school, the candidates have had no practice in answering questions in the vernacular, and have in many cases owing to their imperfect knowledge of English memorised the words of their English text-books.

If the scheme suggested above for English teaching in schools were adopted, the standard of colloquial English possessed by university students on admission should be much higher than at present. It should not be necessary for the university to teach English except in the form of English literature, and this only to students who adopt a linguistic or similar course."

Mr. Riohey summarises his suggestions as follows:—

- "(a) all subjects save English should be taught through the medium of the vernacular to the end of the high school stage, with the possible exception of mathematics in which the technical terms are borrowed from English :
- (b) by adopting the above system a good deal of time would be set free which is at present wasted in endeavouring to teach the pupils through a medium they imperfectly comprehend, and also in revising in English matter which has already been taught in the vernacular. This time should be utilised by the English masters of senior classes for practising the boys in expressing in correct English the knowledge which they have acquired through the vernacular :
- (c) at the matriculation examination a candidate who proposes to proceed to the university should be required to answer in English question-papers set in that language on the subjects which he will study at the university. In all other subjects except mathematics he should be examined through the medium of the vernacular. Candidates not proceeding to the university should be examined through the vernacular, save in mathematics and English :
- (d) the aim of the English teaching in the secondary school should be to train boys to understand and speak colloquial English, and to write the language grammatically :
- (e) the study of English literature should not be attempted before the university stage. At that stage it should form a subject equivalent to, but not of more importance than, mathematics, history, etc., and should be included in such courses as the University may think suitable. The teaching of colloquial English is not the function of a university."

96. Mr. C. E. W. Jones, Director of Public Instruction in the North-West Frontier Province, thinks that English should be the sole post-matriculation medium, because of the multiplicity of the vernaculars, the lack of vernacular text-books and the popularity of English in his province; he doubts whether such students would care to receive instruction through the medium of the vernacular or to be examined in it if the choice were offered them. He thinks English should be taught as a second language from the beginning of the fifth to the end of the tenth year of school life and

should only be employed as a medium in the years corresponding to the present intermediate stage. He urges that the present system not only hampers the pursuit of general knowledge but also handicaps the study of English, as practically the whole time of the boys is devoted to text-books, and conversation and simple composition are neglected. Like many other witnesses he advocates a more practical and less literary study of English.

97. Mr. S. G. Dunn, Professor of English Literature in the Muir College, Allahabad, would use English as the sole medium in the majority of universities, but sees no objection to the use of a vernacular in 'universities of a purely indigenous type.' He suggests that English should not be the medium of instruction in schools but should be taught as a second language (by trained teachers) at about the '5th class stage' when the pupils are 12 or 13 years of age. He regards it as essential to make the distinction between practical training in the use of the English language and training in the study of English literature.

98. Mr. G. A. Wathen, Principal of the Khalsa College, Amritsar, writes :—

"I consider that university students on their entrance to the university have an inadequate command of English. Yet I would not use English as a medium of instruction in secondary schools for all subjects for teachers have not themselves a free command, and the use of it tends to indescribable cramming which is usually fatal to all intelligence and originality. If we had at least one really good master in every school we might get English better. The reason for the low standard is because the teachers teach and speak a language of which they are seldom masters."

99. We have (for reasons given in paragraph 79 above) restricted the evidence quoted in regard to the use of the vernacular in secondary schools, to those who think that English must be used as the university medium at any rate above the present 'intermediate' stage. But certain evidence from the other sources cannot be overlooked.

Several of the witnesses cited above have referred to cramming and memorisation of work not understood as due to the premature use of English as a medium of instruction and examination. The evidence of Dr. P. Neogi, Professor of Chemistry at Rajshahi, on this point is direct and significant :—

"When," he says, "I see my younger brothers and young children committing to memory pages after pages of books written in a language which

¹ The answer of Mr. R. N. Gilchrist to Question 2 may also be referred to in this connexion.

they do not understand for the purpose of disgorging their newly acquired knowledge in answer papers I cannot conscientiously blame them for their lack of cramming. If secondary education be conducted in the vernacular a much larger number of subjects may certainly be taught than at present, and the very low standard that prevails in the matriculation examination may easily be raised."

The question whether boys trained by the use of the vernacular medium are more advanced intellectually than those trained through English has been raised in paragraphs 21, 22, and 23 above.—On this point we may quote the personal experience of Mr. Ramananda Chatterjee. He writes as follows:¹—

"English being taught only as a language and literature, all other subjects in the school courses should be taught through the medium of the vernacular of the children. This will give them a far better grasp of the subjects taught than the present method of using English as the medium of instruction. They will assimilate knowledge better, and will be better able to think for themselves. My experience is that, at the age of 10 or 11, in the highest class of the vernacular school where I first received education, my fellow-students and myself knew more of history, geography, mathematics, hygiene, sanitation, and natural science combined, than my class-fellows of 15, 16, 17, 18, or more, knew when I was subsequently in the highest class of a high school preparing for the matriculation examination. Similar has been the experience of many others."

VIII.—*The teaching of English in secondary schools.*

100. We have seen the remarkable and apparently irreconcilable differences of opinion which exist among expert witnesses in regard to the use of English as a medium in schools and in the University. We reserve our own conclusions in this matter for Part II of this report.

101. The dissatisfaction of witnesses with the present system of teaching English is practically universal and finds expression in the replies to Question 11, sections ii(a), ii(c) and ii(d). We have incidentally quoted a number of replies to these queries and propose to deal with them only briefly. With few exceptions our witnesses think the present teaching (i) gives undue attention to complex grammatical rules, which the pupils cannot understand; (ii) attempts to give a training in English literature to pupils who do not understand the English language; (iii) neglects training in simple conversation; (iv) neglects training in simple composition; (v) neglects training in pronunciation and diction.

¹ Question 1.

102. *Teachers of English*.—As many of our witnesses point out, it is impossible to lay down methods of teaching independently of the quality and experience of the teachers who are to be asked to use them ; and the average qualifications and pay (the connexion is obvious) of the present teachers of English, especially of those for the lower classes, have been severely criticised.

Kazi Imdadul Huque, Head Master of the Calcutta Training School, urges—

“the appointment of efficient teachers of English in all classes from below upwards. The practice now (he says) is to leave the beginners and the lower classes generally in the hands of ill-qualified and ill-paid teachers. This must be discontinued. None but thoroughly trained men should be allowed to teach English in any class.”

Mr. Bimalananda Sen, Head Master of a high school at Bogra, writes in the same sense. He tells us that—

“what generally happens is that teaching in the lower classes in most middle English and many high schools is entrusted to a matriculate who has somehow just managed to get his certificate but has neither knowledge of his subject nor skill in teaching : and the result is deplorable. Thus the groundwork becomes extremely bad.”

Mr. Satis Chandra Sen, Head Master of the Hindu School, Calcutta, gives similar evidence ; and Miss Sorabji, Principal of the Eden High School, Dacca, says that—

“too often even Bengali graduates are unable to frame questions or to correct the answers of pupils except from the actual words of the book.”

Mr. F. C. Turner, of Dacca College, thinks that the main, and it might be said the only defect (in the teaching of English), is the lack of knowledge of the English language on the part of the teachers. Many witnesses insist on the desirability of having better teachers. Some would have the best (the Murarichand College, Sylhet, suggests M.A.’s) to teach the lowest classes ; and the suggestion carries with it a necessary increase in the rate of pay, which is urged (among others) by Mr. B. C. Bose, Mr. A. H. Mackenzie, Mr. Benoy Kumar Sen, and Mr. Panchanan Sinha, besides the witnesses quoted above.

103. *Training of English teachers*.—Kazi Imdadul Huque’s plea for previous training is supported by the heads of other training colleges, Mr. Mackenzie and Mr. Mathura Kanta Nandi, and also by Mr. J. A. Richey, Dr. P. D. Shastri, Mr. Satish Chandra Mukerji, and Mr. Benoy Kumar Sen. Sister Mary Victoria and a Bengali member of the Scrampore College suggest that no one

should be allowed to teach English who has not undergone a thorough practical test of his powers before a special board; Sister Mary Victoria suggests that the examination should be conducted by the Education Department; and Dr. Gilbert Slater makes the practical suggestion that 'Methods and Practice of Teaching English' might form a special subject at the L.T. examination; although perhaps the subject deserves more time than could be allotted to it in this way, we shall deal in Part II with similar proposals.

104. Dr. M. N. Banerjee proposes that teachers of English should either be persons specially trained by Englishmen or Indians who have had their education from Englishmen. Miss Sorabji of Dacca and Mr. Kumar Manindra Chandra Sinha suggest that the difficulties of obtaining suitable teachers of English might be overcome by employing Anglo-Indians; and Miss Sorabji thinks that the local European schools could provide teachers from the Anglo-Indian and domiciled communities, who, after special training in a training college, would render useful service. Miss Sorabji proposes, as a complement to her suggestion, that the major vernacular of the province should be a compulsory subject in all European schools. "Would not this," she says, "help to bridge the gulf between the domiciled English and the Indians, the children of both communities learning each other's language?" It is clear, at any rate, that teachers of English for the lowest classes in a school must necessarily be acquainted with the vernacular. In regard to the question of accent Miss Sorabji writes that she finds that Indian children do not catch the undesirable accent of the Indo-European or domiciled English and that the better class of the latter are becoming more careful about their speech. Miss Sorabji's suggestion seems worthy of careful consideration. The suggestion that women European teachers might be employed in secondary schools (for boys) is made by Mr. Ravaneswar Banerjee.

105. *The Direct Method*.—As one of the most important ways of improving the teaching of English, the 'direct method' has been suggested by a large number of experienced witnesses.¹ Miss

¹ See the evidence of the Association of University Women in India, Mālīvi Abdul Karim, Narendrakumar Majumder, Mr. Provash Chunder Mitter, the Rev. Father Neut, Raja Pramada Nath Ray, Mr. Meghnad Saha, Mr. Surya Kumar Sen, Dr. Nares Chandra Sen Gupta, Dr. P. D. Shastri, Dr. Hassan Suhrawardy, Mr. Siti Kanth Vachaspati and Mahamahopadhyaya Dr. Satis Chandra Vidyabhusana.

Sorabji thinks that English should be taught by the direct method from the infant class upwards by teachers whose language it is. Dr. David Thomson, Officiating Inspector of Schools in Assam, tells us that—

" in all the high schools in the Surma Valley Division of Assam, English is now taught from Class III upwards by the 'direct method,' with very good results. An endeavour is being made to root out the old translation method—which teaches English as a dead language—from all schools in this Valley."

According to Mr. Cunningham's evidence, the vernacular in the Surma Valley is Bengali, so that the evidence has a wide application to other schools.

Mr. Sharp writes :—

" For the lower classes the direct method is valuable and I have seen it applied with excellent effect in some parts of India. But the exclusive use of this method is probably feasible in very small classes ; nor do I at all believe in the banishment of translation and retranslation—indeed I set great store on them."

106. Mr. M. P. West's experience has been less fortunate :—

" The direct method," he writes, " is a complete failure in Bengal schools. It asks too much of the teachers ; it is useless for the upper classes, where complicated ideas or abstract words are needed."

Mr. Jatindra Chandra Guha, Professor of English in Rajshahi, thinks—

" the direct method of teaching English, as far as our schools are concerned, cannot from the very nature of things mean anything but a travesty of the real thing, for we cannot make our boys live habitually in an atmosphere of English and also cannot provide for the teaching of English in the school-classes by Englishmen."

Mr. Guha suggests in some detail a middle course between the scholastic and colloquial methods. Dr. Seal writes in the same general sense as Mr. Guha. But their criticism, if valid, would apply not less to the teaching of the direct method of English in France, or of French in England, than it does to the teaching of English in India. The 'direct method' is now used as a short-hand expression to describe not the natural process of learning a foreign tongue in the country in which it is spoken, but the imitation of that method used in the class rooms of the mother country. These witnesses are not however alone in their opinion. Mr. H. V. Nanjundayya, Vice-Chancellor of the Mysore University, regards the (so-called) direct method as a snare ; and Syed Abdul Latif, Khan Bahadur, advocates that English should be taught 'as a

foreign language,' with English grammar, spelling and composition as in former days.

107. *Teaching of Grammar.*—There are many protests against the excessive importance attached at present to grammar.

The Scottish Churches Senatus write :—

" At present the training in English is not satisfactory. English is taught in most cases as a dead language, little practice being given in the speaking of the language. The whole system, especially in the higher classes, is subordinated to the matriculation examination, in which, if a candidate makes fairly good marks in formal grammar, he can scarcely fail to pass."

The Rev. T. E. T. Shore protests against the grammars ' of quite unnecessary elaborateness and complexity ' put into the hands of boys even in the lower classes, and committed to memory. Mr. J. R. Barrow, Mr. Radhikanath Bose, Dr. Nares Chandra Sen Gupta, Mr. P. C. Mahalanobis, Mr. Joges Chandra Ray, Dr. Tej Bahadur Sapru, and Mr. Anandakrishna Sinha also protest against the time spent on grammar. Dr. P. D. Shastri would prefer to use no books on grammar but to teach it only incidentally. Mr. H. Sharp also holds that less time should be spent on formal grammar ; and thinks this should be possible if a boy has learnt his grammar, syntax and analysis properly in the vernacular, and if full use of this knowledge is made in teaching him the same thing in English. Mr. Haridas Goswamy, "writing in the same sense (though without specific reference to grammar), holds that instruction in the foreign tongue should be preceded by instruction in the mother tongue, without which much of the teaching is ineffective or becomes an arduous task ; and Dr. Gilbert Slater makes the important suggestion that attention should be given in training teachers of English to secure that they shall have a thorough understanding of the differences in structure between English and the vernacular.

108. From the witnesses who think too much attention is now paid to grammar we pass to those who hold exactly the contrary view : Sir Gooroo Dass Banerjee, the Maharajadhiraja Bahadur of Burdwan, Mr. S. M. Ganguli, Mr. Jnanchandra Ghosh, the University Inspector of schools, Mr. Jatindra Chandra Guha, Mr. Rajani-kanta Guha, Mr. H. V. Nanjundayya, Rai Biswambar Ray Bahadur, Mr. Manmathanath Ray, and Mr. Benoy Kumar Sen, who thinks

that 'a systematic study of English grammar has been thoroughly discouraged.' Mr. Devaprasad Ghosh writes:—

"The standard of grammar ought to be higher; the question of cramming will be raised, but I know of no other method (than cramming and mechanical memorising) of learning the grammar of a foreign tongue."

109. *Prescribed Text-books.*—The Regulations of 1906 abandoned the previous method of prescribing English text-books for matriculation, but provide a larger number of 'recommended books' in order to indicate the standards up to which candidates are expected to have read,¹ and from which passages may be, but are not necessarily, set. Not more than 35 marks out of a total of 200 allotted to English can be assigned to such passages.

110. Against this change a considerable number of our witnesses protest, and wish either to return to the old system or to some modification of it.

Mr. Symacharan Ganguli writes:—

"The idea which underlies the prescription of a large number of books seems to be that much reading is necessary to acquire an adequate knowledge of a language. This does not appear to me to be a sound view. A few books carefully read I consider to be of far greater value than a large number of books run through without proper attention. My experience as a teacher was that the great majority of the pupils failed to remember well the words and phrases they met with in their English text-books, and so could not apply them in what they wrote or spoke. A multiplicity of books is rather an embarrassment than a help. Practically it is impossible for all the books recommended to be read. Nor is it intended that they should be read throughout, it seems. Portions of each book only are read. But the books have to be bought for all that. This is a heavy infliction on a poor country like India. I have heard complaints from guardians that they felt it as a great grievance that they had to buy so many books for their wards."

Rai Bahadur Nisi Kanta Ghosh, agrees with Mr. Ganguli's views, but thinks that no one either buys or reads the books. Mr. Radhikanath Bose, Principal of the Edward College, Pabna, says emphatically:—

"If we want to make our school boys better grounded in English the present matriculation system of 'no-text' should be discontinued. Boys must be required to read and re-read some good specimens of English composition before they can be expected to perform any good composition themselves."

Mr. Sharp thinks a few text-books should be set for examination but that there should also be set questions bearing on general reading and unseen passages; and similar views are put forward by Maulvi

¹ Resolution of the Government of India no. 680, of 11th August 1906, Section 21 (reprinted in the University Calendar).

examination system, which exercises so severe a control over the secondary school, would harmonise in this question of text-books as in other questions, views which at the first blush seem irreconcileable, but each of which considered separately seems eminently reasonable.

113. But nothing could be worse than any regulations which would lead to the use for matriculation of the utterly dull and lifeless system of lecturing on English texts which prevails in the colleges. It seems almost incredible that such lectures should be given—as they mostly are now—in an uninterrupted stream without the slightest direct attempt on the part of the lecturer to ascertain by questioning whether the class is following or not; and without the slightest opportunity for any member of the class to ask a question. In many cases the explanations are dragged out to an intolerable length, sufficient to kill all interest in the subject. We have heard ten minutes devoted to half a dozen simple lines in Shakespeare for which half a minute would certainly have sufficed. The average teacher of English in an arts college (there are of course exceptions) has very little idea of the method of making such a lesson living and interesting; and many of the lessons, though conscientiously prepared, seemed to us to involve sheer waste of time for both teacher and taught, except possibly for the fact that the students heard English spoken for an hour. In this connexion many witnesses have pointed out the need for training teachers and students in English speech, a subject to which we shall revert in Part II. Part of the dulness of the lectures on texts is due to the inability of the teacher to read with the right cadence and expression, an inability for which it would be unjust and wrong to criticise him under existing conditions.

IX.—Practical training in English language and the study of English literature.

114. *Practical training in English and study of English literature.—Section ii(d) of Question 11, viz.,—*

“Would you draw a distinction, both in school and university, between practical training in the use of the English language and training in the study of English literature?”—

has elicited a reply in the affirmative from very nearly all the correspondents who have dealt with it. But the replies show a marked and important difference of opinion on the policy which should be

adopted, especially in the secondary schools. Some 40 witnesses say explicitly that the teaching of English literature should be entirely discontinued in secondary schools ; about 30 are equally emphatic in thinking either that the two kinds of training, the practical and the literary, are inseparable, or that both should be given in schools ; and another ten or twelve who are of the same opinion, would lay greater stress on practical training in the schools and on training in English literature in the University.

115. The three professors of chemistry at Presidency College, Mr. Jyotibhusan Bhaduri, Dr. B. B. Dey, and Mr. Bidhu Bhushan Dutta say bluntly :—

“ In the schools, English literature need not be studied as such. School boys should be trained to write simple, clear and correct English ; and understand modern English prose works dealing with topics familiar to them.”¹

Mr. Baikuntha Nath Bhattacharyya, Head Master of a high school at Sylhet, writes :—

“ In school, there should be only practical training in the use of the English language, to the exclusion of the study of English literature. In colleges, the use of the English language should be compulsory for all grades there being a department of English literature for specialisation.”

The Indian Association, Calcutta, also think that the student only needs a working knowledge of English ; and Mr. R. N. Gilchrist, Principal of Krishnagar College, says—

“ what is primarily wanted is, on the part of the student, a knowledge of how to write clear English prose and speak clear, intelligible English.”

116. But the most interesting, because perhaps the least expected, advocates of the purely practical training in the school are some of the university teachers of English literature. Mr. J. R. Barrow, whose weighty evidence we have already referred to, holds—

“ that the premature introduction of the learner to literature must cause grave confusion, . . . that complete familiarity with the language is essential to the appreciation of literature, and that to set boys to read literature before they have acquired that familiarity is utter waste of time. It is the function of the schools to give to every pupil a good knowledge of modern English. It is the function of the colleges to add, in the case of students with literary tastes, some knowledge and appreciation of English literature.”

Mr. S. G. Dunn, Professor of English Literature at Allahabad, writes that the distinction between practical training in English

¹ See also para. 31 above, and evidence of the Rev. A. E. Brown quoted in para. 33 above.

language and training in English literature is essential and that—

“ because it has not hitherto been recognised in our Indian universities, our English courses have been futile. At present the university teacher has to teach English literature to students who have not mastered the English language ; he tries therefore at the same time to give them this training which they should have received at the schools ; he has not time for both, and the result is that neither is properly acquired by the students.”

Mr. T. Cuthbertson Jones, Principal and Professor of English, Agra College, who does not deal separately with schools, writes :—

“ I would certainly draw such a distinction. I would drop English literature (including the study of Milton, Shakespeare, Tennyson, Keats) as a compulsory subject for the arts degree. This is what makes an Indian university ridiculous in the eyes of Europe, and gives point to the jests about Babu English. For the unfortunate Indian student too frequently devotes to learning notes on Shakespeare by heart precious time which might be more profitably spent upon history, economics and acquiring a good working knowledge of modern English prose. Let the exceptional student who has a taste for literature take up Shakespeare and Milton as optional subjects, but let us be content with a fair knowledge of current English for the average man.”

The Rev. W. H. G. Holmes, of the Oxford Mission, Calcutta, endorses the views of the professors just quoted :—

“ The present training in the study of English literature is largely futile because the students do not know English well enough to use it with even moderate ease and correctness. All that the study of English literature means to them is an exercise in memory by which certain phrases and sentences from essays by such men as Stopford A. Brooke or Carlyle are to be retained sufficiently long to be disgorged when wanted.”

117. Mr. T. O. D. Dunn suggests a middle course ; he does not recommend any study of English literature as such in the school but advocates—

“ training in the use of the English language only, assisted by the reading of simple English texts arranged to that end. Skilful choice of reading material may enable ‘ literature ’ to be introduced ; but its study will be as it were, unconscious.”

118. On the other hand, Mr. Mark Hunter, till recently Professor of English in Madras, writes :—

“ I do not believe that, for university purposes, any such distinction can be profitably drawn. One is very familiar with criticism of a purely destructive character of literary courses in English, and endless exhortations to make our courses more ‘ practical ’ have been addressed to us. If anything in the shape of constructive criticism has been offered it has hitherto escaped my notice, and I have yet to see, even in rough outline, any sort of definite scheme for a ‘ practical ’ university course in English. After all, for university

purposes, the study of language cannot well be separated from a study of books, and books possessing a literary value will always be found to be more suitable than books which have none. The practical ends will themselves be best served if the course in English be a well-conceived literary course. Besides, courses in English are intended to serve cultural no less than practical ends. I do not believe there is in reality any conflict of aims. A course in English will be of practical value, that is to say; it will give the student what he wants for the successful study of other subjects, and for engaging profitably in practical affairs—capacity to read with understanding, habits of clear and accurate thinking, facility in expression—very largely in proportion as the course is *literary*."

Rai Bahadur Bhagvati Sahay, Officiating Inspector of Schools in Bihar and Orissa, would insist on a paper at matriculation testing a certain degree of acquaintance with English literature. He writes¹ :—

" The fact that a working knowledge of the English language is not enough for college studies seems to have been altogether lost sight of. Not to speak of an Indian, even an Englishman whose mother tongue is English and who has not been taught English as a literary language, will not be able to follow a college course ; and yet in this country it is believed that, if we teach the student just to read, write, speak and understand simple English, we qualify him for a college course. The root of the evil lies in this."

Mr. P. K. Chatterjee, Vice-Principal of the Carmichael College, Rangpur, thinks that a practical training in the use of the English language should supplement and not supplant training in the study of English literature, whether at school or at the university.

X.—University training in English.

119. At the present moment English (including English literature) is compulsory at the intermediate examinations in arts and science (which are identical in this subject) and also at the B.A. examination. But no English is required after matriculation for students of medicine or engineering.² It is to be noted that the regulations prescribe that the questions on unseen passages at the intermediate examinations shall be "from books of the same standard of difficulty as those recommended for the matriculation examination." It might have been expected that an additional two years' course of study ought to have allowed of a higher standard for such passages.

— Question 8.

² In law students cannot proceed to a degree unless they have previously taken a degree in arts or science.

120. 153 witnesses have given definite replies to section ii (/) of Question 11.¹

"Do you think that English should be taught to all students during their university course and, if so, what kind of teaching would you advocate for those whose general course of study may be other than linguistic?"

Of these 119² would give training in English to all students, linguistic and non-linguistic, up to the degree stage; but they divide themselves into three groups: (a) 48 who would give the same training, including English literature, to all students; (b) 21 who would also give the same training to all students, but who would make that training mainly practical and not include English literature, except for those specialising in English; and (c) 48 who would differentiate between linguistic and non-linguistic students, and who would give a literary training to the linguistic, and a practical training to the non-linguistic. The remaining witnesses are divided into smaller groups: 14 would make English compulsory for all students up to the intermediate stage and for linguistic students up to the degree stage; five would simply make English compulsory up to the degree stage for linguistic students only; five would make English compulsory for all students, but only up to the intermediate stage; and ten would not make it compulsory at all.

121. We have excluded from the last category a few witnesses like Mr. Barrow and Mr. Richey, who think that English is required in the university at present, but ought not to be required when the teaching in English is improved in the secondary schools. Mr. Barrow thinks that if all students after their school course could read and write and speak modern English, all that would be necessary for students with no special taste for languages would be to ensure that they did not forget the English they had learnt; and of that he thinks there would be little danger with the practice of listening to lectures and the opportunities for conversation and for reading papers and modern English books.

122. The cleavage of opinion apparent among the witnesses in dealing with section ii(d) of Question 11 (see paragraphs 114-118 above) naturally reappears under section (ii) (/); the most interesting of the replies under this heading are those which deal with the

¹ In regard to these statistics the same caution must be given as is given in para. 26 above.

² We have, however, included in this number one or two witnesses who make specific exceptions in the case of technological and medical students.

training required for non-linguistic students, a category which would include not only science students but students in history and economics as well as those in medicine and technology. Mr. Jogendra Nath Hazra regards as the essential in the training required for such a student an amount of knowledge which will enable him to express himself systematically and in good English in saying what he has to say on the subjects of his studies, an ideal identical with that of Mr. Gilchrist and of the chemistry professors quoted above (paragraph 115).

123. But Mr. Hazra defines the object rather than the method of such training, in regard to which several witnesses make suggestions. Mr. C. E. W. Jones proposes a general course for the non-linguistic students :—

"(a) Rapid reading of a certain number of standard works of general interest, (b) frequent essays on the subject matter of those books, (c) conversations or discussions, between teachers and students and between students and students, on matters of general interest", with a degree course on much the same lines.

Mr. Cuthbertson Jones thinks that standard English prose works should be read by students 'in their leisure hours' under the supervision of their tutors. Mr. A. H. Mackenzie writes on the same lines as Mr. C. E. W. Jones and Mr. Cuthbertson Jones : he thinks students should be trained to read books for the sake of their contents ; that they need not be taught to grasp the significance of each phrase, the aim being to give them the power to read intelligently and quickly ; and that in composition, students should be trained to refer to books for information on some specific subject, to make intelligent use of an index, and to collect from different sources, and arrange, facts bearing on a given topic. Mr. M. B. Cameron, who also suggests a course for such students, thinks that it should be given by the best teaching power available for English.

124. Rai Mahendra Chandra Mitra Bahadur makes the interesting suggestion that the English course for non-linguistic students should deal with the history of the subject, and that they should study extracts from the works of the best authors, including the biographies of great scientific men. "As English is the only medium of exchanging the thoughts of the people of different provinces," he suggests that the study of English literature should be compulsory throughout ; and Mr. Jaygopal Banerjee, University Lecturer in English, makes similar proposals. . . .

125. Both Rai Bhupatinath Das Bahadur, Professor of Chemistry at Dacca, and Dr. B. C. Ghosh, University Lecturer in Philosophy and Psychology, and Lecturer at the Belgachia College of Medicine and the Vidyasagar College, are anxious that science students should study English literature up to the intermediate stage. After that stage the former witness suggests that the reading should be limited to popular prose works on scientific literature by Tyndall and Darwin and Proctor, scientific essays by Thorpe, Ramsay and Tilden, and Mr. R. A. Gregory's book on *Discovery*, while Dr. Ghose recommends that medical students who have not passed the intermediate standard should receive some training in English composition.¹

126. Rai Dinanath Biswas Bahadur, Secretary of the Edward College, Pabna, thinks that students in science and technology should be required to attend courses in English, but only to pass class examinations and not university examinations in that subject.²

127. Mr. Paranjpye, Principal of the Fergusson College, Poona, combines a plea for the claims of English literature as an indispensable influence on Indian education, with valuable suggestions for practical training during the university course.³

"In school," he writes, "a distinction should certainly be drawn between a knowledge of the language and a knowledge of its literature. But in the uni-

¹ The number of such students in the medical colleges is almost non-existent at the present day. See Chapter XXIII, para. 42.

² See Chapter XVII on Examination, paras. 112-114 and paras. 160-167.

³ Detailed suggestions in regard to method not referred to in the text have been made by Maulvi Tassefduq Ahmed (who proposes among other things the use of debating societies to overcome bashfulness in speaking English and the editing of a bi-lingual school journal under the supervision of a teacher); Khan Bahadur Maulvi Ahsanullah; Sir P. S. Sivaswamy Aiyer (who advocates training in the use of a dictionary, an instrument very little owned or used in schools; and the abandonment of questions involving criticism of literary authors, which can be crammed from text-books); the Association of University Women in India; Sir Gooroo Dass Banerjee; Mr. Jaygopal Banerjee (who thinks undue importance is attached to the process of translation and re-translation and advocates intensive teaching of one or two text-books); Mr. J. R. Barrow (whose book on *Language and Literature* should be consulted for a fuller development of his suggestions); Mr. Chinta Haran Chakravarti (who suggests that boys should be trained in taking notes of the main points of their teachers' lessons, as a preparation for similar note-taking in class); Mr. T. O. D. Dunn (who insists on the cultivation of the power of expression in English from the earliest stages, ear-training and conversation, and the use of modern literary material dealing with ideas familiar to young Indian minds); Mr. Rabindra Mohan Datta; Mr. Surendra Mohan Ganguli; Mr. Syamacharan Ganguli; Mr.

and this should be entrusted not to the regular professors of English but to those who teach the students their regular subjects. Practice in English composition and in making a connected speech for a few minutes would be a very desirable addition to the student of science or mathematics. But all this should be done in a thoroughly practical, and not in a pedantic, spirit."

XI. Various suggestions on methods of teaching English.

128. We have received many other valuable and interesting suggestions in regard to method generally which we cannot afford space to discuss in detail. A reference is given to the names of the witnesses in question in the accompanying footnote.¹

XII.—Summary of the situation in regard to the teaching of English.

129. The present position in regard to the teaching of English may be summarised as follows.

A knowledge of English is at present regarded as of essential necessity to the university student in Bengal. During the ten years of his school life he gives far more attention to it than to any other subject; in the last two years he often devotes on an average 14 hours in school and 12 hours out of school to it, 26 hours in all, that is more than is allotted to any single subject in any secondary system in any country with which we are acquainted. The result obtained, though real, is totally inadequate to the time and efforts spent on it by teachers and by taught.

XIII.—The teaching of the mother tongue.

130. We have referred in Chapter VIII² to the vital importance of the mother tongue. Many witnesses in oral evidence during our tour, and some in written, have expressed to us the view that the mother tongue is neglected in the schools and colleges of Bengal in spite of the university regulations;³ and in the opinion of some persons the university requirements are such that too little attention to the subject is demanded of the teaching institutions. We have discussed this matter in Chapter XVI and shall deal with it further in Chapters XLI and XLII.

¹ See footnote to para. 127 above.

² Paras. 57 and 89.

³ See Chapter XVII on Examinations, paras. 112-114 and paras. 160-167.

CHAPTER XIX.

CONDITIONS OF STUDENT LIFE.

I.—Introduction.

1. True education is the development, by training and self-training, under the impulse of a social ideal, of all a student's powers, physical, moral and intellectual. One of the things which such an education may give to him is a rightly proportioned view of society, of his place in it and of his obligations towards it.

"The supreme object of education," writes Mr. Haridas Goswamy,¹ "is not bread-winning preparation (essential as that is) nor its instrument; not high technical skill (good as that is too), nor learning (necessary too), but the complete individual and social blossoming of the pupil, the flowering of a human being in holiness, truth and beauty, in health of body and strength of character, with a passion for service, and skill to serve with that especial genius which God has given to each; in short, the making of a citizen worthy of his regional home and university, of his native country and humanity, —a true world citizen."

2. Such an education comes not alone from professors or tutors, nor alone from the study of books and work in laboratories, from reflexion and self-criticism, but also, and in great measure, from the social character and the conscious or implicit purpose of the community to which the student belongs and from the resulting environment in which he moves. This, as Plato saw, is for most men the chief influence which forms habit and character in youth. In this chapter therefore we shall attempt two tasks, connected though distinct; on the one hand, to picture the environment of student life in Bengal—an environment which has great power for good or evil—and on the other hand to portray the likeness of the typical student. This inquiry is of central importance to a just estimate of the present situation. It will also demonstrate the urgent need for improvement.

II.—The migratory student, and his lodging while at college in Bengal.

3. The problem of students' residence in India, and especially in Bengal, is, in some ways, unique. The Bengali student is

¹ Question 1.

of migratory habits ; and these habits are encouraged by social conditions which are described in a later paragraph. During 1917-18, 51 colleges of Calcutta University had on their rolls 27,290 students. Of these only 8,942 (or 32.7 per cent.) belonged to the town or even to the district¹ in which the college is situated ; the rest came from elsewhere. Immigration was most marked into Calcutta, which is a magnet to the mufassal. Of the 15,755 students in the 22 Calcutta institutions,² no fewer than 12,365 came from the mufassal. The Central College had only 67 Calcutta students out of a total of 642 ; the Bangabasi College only 266 out of 1,431 ; the Ripon College not more than 190 out of 1,881. In a less marked degree, the same conditions obtain in the mufassal. Rajshahi College, out of a total of 779, had 567 students who did not belong to the town or district ; the Edward College, Pabna, 160 out of 398. Chittagong College was exceptional in having only 88 immigrant students out of 328 ; but this was because, though students from the district are scattered among colleges far afield, Chittagong itself seems to those who live at a distance, to be in a remote corner of Bengal.³

4. The migration of students is general throughout Bengal. The large Calcutta colleges are fed from practically every district. The Presidency College, for example, draws its students from 27 districts of Bengal, as well as from 13 other provinces or native states ; the City College from 25 districts of the Presidency and from ten other regions as well. The more important mufassal colleges cast their nets almost as widely. Rajshahi College includes natives of 24 Bengal districts, besides Assam, Bihar and Cooch Behar ; even the Cotton College, in remote Gauhati, can count students from 16 Bengal districts. To put the same facts in another way, each district sends its youths to a large number of institutions. Of the 1,481 college students whose homes are in the district of Mymensingh, 1,031 are distributed over 40 institutions outside the district ; of the 497 students from Bankura district who are at college, 277 are distributed over 29 colleges in other districts. These figures prove the remarkable mobility of the Bengali

¹ It should be noted that a very large proportion even of the students who come from the district in which the college is situated must live away from home during term time.

² Excluding Civil Engineering College, Sibpur.

³ The detailed statistics will be found in Statement III, Volume XIII.

student ; and this mobility is mainly responsible for the residential problem. This outstanding feature of student life in Bengal ought to make it easy to attract the students to a relatively small number of centres where special facilities could be provided.

5. The migratory habits of the Bengali student are due to many causes. To travel far for education is in India an ancient tradition. The custom of the country makes it habitual. Owing to the small size of the towns in Bengal and the lack of local facilities for quick transit, the number of students who can travel daily from their homes to the mufassal colleges and back in the evening is very limited. Again, students are drawn to Calcutta by the fascination and glamour of the great city, by its superior educational advantages and the large choice of colleges which it offers, by the comparative vigour of its social and intellectual life and, in particular, by its healthiness. The larger mufassal centres, Dacca, Rajshahi and Berhampur, have like, though lesser, attractions ; some of them are healthier than the malaria-ridden country-side ; and their colleges enjoy considerable prestige. Many students, again, welcome the opportunity to escape from the *res angustae* of their home and village conditions into the fuller and less circumscribed life of the towns. Above all, Bengal is a country of villages and scattered homesteads ; its towns, with the exceptions of Calcutta and Dacca, are few and small, and this makes migration inevitable for most students.

6. For these reasons Bengali parents are willing to send their sons to distant colleges ; and the sons are eager to go. The difficulty is to provide for their accommodation. The individual student cannot easily arrange for his own residence, as he does, for instance, in London. In Bengal, means of rapid local transit are (except in Calcutta) non-existent. Social usage with its secluded home-life does not allow the letting of lodgings in the western sense of the word. Boarding houses are few, and hotels are too expensive for the vast majority of students. The joint-family, in some measure, provides an alternative. As a social institution it has gradually become less coherent and comprehensive than in former days ; its remoter obligations are less invariably felt or acknowledged. But it is still a social unit of the first importance. Distant relatives still feel that they have a real claim on each other ; and, since a great many *bhadralok* families have relations or

representatives in Calcutta, a student can often live with some member of the joint-family though in many cases he may be no near connexion. Living with a relative or 'guardian' is still the most frequent solution of the residential problem in Indian college life.¹

7. Residence with relatives and guardians is both natural and, in many cases, healthy. But the significance of the word 'guardian' is often vague; and in a large proportion of cases there is no pretence that the 'guardian' is a relative. The word 'guardian' has in fact become almost a technical term for any person with whom a student lives; and for this reason careful and individual enquiry as to the nature of the 'guardianship' is necessary. Often enough the 'guardian' is merely a person who allows the student to live in his house in return for tutorial instruction for his sons. The Principal of Midnapore College told us that one of his most promising students had suddenly deteriorated in his work. He made enquiries and found that the 'guardian' exacted from the student many hours' tutoring for his sons every day in return for the nominal 'guardianship.' Because the terms 'relative' and 'guardian' are so comprehensive, there is room for abuse.

III.—Steps taken to provide suitable residences for students, and supervision of them.

8. The joint-family, even in its most extended form, and the system of guardianship, however laxly interpreted, cannot provide all the accommodation needed for the multitude of students who flock to the colleges, especially in Calcutta. Organised provision of residence for students who have neither homes nor relatives in Calcutta has long been necessary.

9. For a long time very little effort was made to provide this accommodation. The despatch of 1854 does not allude to the question. A quarter of a century later, an important departure was made in the history of Indian education by the foundation of the Muhammadan Anglo-Oriental College at Aligarh, where Sir Syed Ahmad planned the provision of a liberal education for

¹ In 23 Calcutta colleges in 1917-18, there were only 3,413 students who had come to the city, but no less than 8,154 were returned as living with relatives and an additional 1,220 with guardians.

Musalmans on the basis of a residential system. The Commission of 1882, though alive to the issues, refrained from detailed recommendations. "Nothing but want of funds," they wrote,¹ "stands in the way of a fuller development of the residential system." In 1887, the Government of India drew the attention of local Governments to the necessity of establishing hostels and boarding houses in which students should be made amenable to something like home discipline. At the same time they suggested that "an ill-managed boarding house in a large town might easily become a hot-bed of evil."² The replies to this reference pointed out that, though the provision of residence was regarded as an essential part of education, the expense involved had prevented any large extension of the system. The Government of India themselves added that "the State already bears a disproportionate share of the expenditure on higher education, and the obligation of providing boarding houses where they do not exist is one which local Governments are naturally loath to accept. It is an appropriate object for private liberality which should be encouraged to regard it as worthy of its benefactions."³

10. Private liberality was soon forthcoming. The Oxford Mission to Calcutta had been studying the problems of student life in Bengal, and had been impressed by the urgent need for good housing accommodation. In 1894 they opened their first hostel in Calcutta, which has ever since remained a model of what a hostel should be. Their aim was not to provide instruction for students, but rather to place them in healthy surroundings and under careful supervision. Their action drew attention to the whole question, and other missionary societies soon began to follow the example, notably the Young Men's Christian Association who have paid particular care to the provision of facilities for physical exercise.

11. The Universities Commission of 1902 did not feel it necessary to do more than offer a few general recommendations in regard to the residence of students in hostels. They went no further than the expression of a hope that "in the course of time the provision of quarters for all students not residing with parents

¹ Report, para. 308.

² Report on the subject of the Discipline and Moral Training, in Schools and Colleges, 1890, page 16.

³ *Ibid.*, page 5.

or guardians may be made one of the conditions of affiliation at least for new colleges.”¹

12. The first attempt to establish an organised system for the provision and supervision of students’ residences in Bengal was made by the Government in 1904. Its action was prompted by a report drawn up by the late Mr. Charles Russell, then a professor at Presidency College.² The Government of Bengal decided to hire a certain number of houses in Calcutta which were to be used as students’ messes attached to particular colleges, and to accept responsibility for the rent. The colleges on their part were to be responsible for the collection of rent from the students, which was to be handed over to Government. Though it was anticipated that the money so collected would be sufficient to cover its liability, Government considered it advisable to provide in the budget for a possible loss of Rs. 10,000 in the first year of the experiment. At the same time, Government appointed one of its officers Inspector of Hostels to draw up regulations, select and assign houses, and generally supervise the inauguration of the new scheme. At the end of the first year, this officer reported that superintendents of messes should be appointed by Government. As it was found impracticable to recover the salaries of the superintendents, either from the students or from the colleges concerned, Government also agreed to bear this further expense (estimated at Rs. 3,350 a year) as an experimental measure for four years.

13. In the meantime the Universities Act had been passed, and, after an interval of some two years, the new regulations had been drawn up and put in force. Under the terms of the new Act the responsibility of ensuring that the students of each college are residing under satisfactory conditions rests with the college authorities. Clause 21 (i) (c) runs as follows:—

“A college applying for affiliation to the University shall satisfy the Syndicate that provision will be made, in conformity with the regulations, for the residence, in the college or in lodgings approved by the college, of students not residing with their parents and guardians.”

14. The regulations enumerate all the permissible categories of residence for students and the rules and conditions which must

¹ Report, page 16.

² We are much indebted to the information submitted by Mr. Gilchrist and Mr. J. R. Banerjee in their report, which is included in the General Memorandum, page 246 and following.

reports any irregularities which he may notice in the course of his inspections to the principals of the colleges concerned. The Students' Residence Committee is not authorised by the regulations to interfere with the internal management of a hostel or mess, or with the control of a principal over his students. But if the Committee is satisfied upon the report of one or more of its members, or of an inspector, that a hostel or mess is maintained or conducted in a manner contravening the regulations, it may report the matter to the Syndicate.

16. When the new regulations came into force, it became clear that the conduct of the mess scheme inaugurated by the Government of Bengal should be transferred to the University ; inasmuch as, under the Act, the responsibility for seeing that the regulations in regard to residence were complied with by the colleges rested upon the University. After a somewhat prolonged discussion, the Government of Bengal agreed to be responsible for any deficit in the house rents up to a maximum of Rs. 9,000, for the salary and office expenses of the Inspector of Messes, and for any deficits incurred in the management of the messes attached to the Government colleges. Beyond this, the Government of Bengal ceased to take any direct part in the provision and superintendence of students' messes.

17. Though the Government thus withdrew from the direct control of messes, it did not consider its responsibility in the matter of providing residential accommodation altogether abrogated. Lord Hardinge, in particular, took a keen interest in the question, and in 1910 visited several messes in Calcutta. During his régime, the Government of India made liberal grants towards the construction of hostels. Between 1911 and 1915 no less than Rs. 37,79,000 have been spent on hostels from Imperial grants ; there are also unspent balances amounting to Rs. 14,48,000.¹ Although the war has necessitated the discontinuance of these grants, His Excellency Lord Chelmsford, the present Chancellor of the University, has evinced an equal personal interest in the problem of students' residence and has visited many hostels and messes in Calcutta.

¹ A sum of Rs. 10,000 from an Imperial contribution was available for several years but the grant has been discontinued during the war.

IV.—Description of hostels (collegiate and inter-collegiate).

18. During the course of our inquiry we, or delegations from our number, have visited a number of collegiate and inter-collegiate hostels, both in Calcutta and in the mufassal.

19. St. Paul's College, which is essentially residential, has two excellent hostels in the same grounds as the college itself. One consists of a three sided court, the other is in the form of the letter L. Each consists of three storeys of a depth of a single room and has a verandah. The end rooms are allotted to the wardens or sub-wardens, who thus command a view of the entire length of the hostel. There are seven professors in residence. With a few exceptions, the rooms are single rooms. There are well-kept bath-rooms, lavatories in each hostel, and an airy sick-room. In each hostel there are several elected prefects;—and each resident has to sign the roll-call in the prefect's room, morning and evening. Applications for leave to stay out in the evening after eight o'clock have to be granted by the prefect and warden. The penalties for breaches of hostel rules are fines and 'gating.' There are specified 'study times' both morning and evening, when every student is obliged to be in his own room. There is a dining room for Hindus of all castes in each hostel, and a common hall for all others. There are ample facilities for physical exercise close by, including a swimming bath, a cricket and football field, tennis and fives courts.

20. Serampore College has three hostels, of which one forms a beautiful quadrangle close to the college and the other two are some way distant. There is a common room with a liberal supply of books and magazines. The arrangements of the hostels are in many ways similar to those of St. Paul's College, and we feel the less need to enlarge on them here because a detailed account is given in the memorandum submitted by the college staff in the answer to Question 17.

21. The Scottish Churches College hostels are scattered in the streets adjoining the college, and there is a resident professor¹ in each. Each hostel has its library managed and supported by the students themselves. The management is not radically different from that of Serampore or St. Paul's. The smallness of the

¹ There is accommodation for married European professors in these hostels.

hostels (50 to 100 students in each) allows close contact and friendly intercourse between professors and students.

22. We commend especially the admirable system of discipline in these colleges, in the maintenance of which prefects and monitors play a part.¹

23. Representative of a different type is the Eden Hindu Hostel, attached to the Presidency College. The buildings are in the form of a large red-brick quadrangle, three sides of which consist of living rooms and the fourth of long low dining halls. The grassy lawn enclosed is large enough for hockey or cricket, and is used for these purposes. The fact that 254 students are accommodated in the hostel differentiates it from the much smaller hostels described above. Under the trust deed, admission is confined to Hindus, another point of dissimilarity. There is a resident member of the staff in charge as superintendent and there are two assistant superintendents. The hostel is divided into six wards. A professor is attached to each ward but his duties are not clearly defined ; and he is not required to live in the hostel. A European professor, in particular, finds it difficult to obtain suitable quarters near the hostel. Each ward has a nominated prefect, who takes roll-calls and enjoys certain privileges. The ward has some activities of its own, a debating-society and a magazine, and one or more annual social gatherings. What corporate life there is, is thus practically based on the ward and not on the hostel. Most of the rooms contain three or four students each, but there are several single rooms ; these are, however, dark and ill-ventilated. On the whole the Eden Hostel may be regarded as a favourable specimen of the type of hostel which accommodates hundreds of residents but provides no adequate facilities for recreation, and very few opportunities for intercourse between teachers and students.

24. In the same category are included some of the hostels recently built from a grant provided by the Government of India for the use of students of the City, Ripon, Bangabasi and Vidya-sagar Colleges. Their size is explained by the heavy price of land in Calcutta. But what characterises them is not so much the nature of the buildings as the absence of proper supervision and contact. If these hostels were divided into wards, each contain-

¹ Serampore College has no prefects

ing quarters for a teacher, they might in time develope some of the best features of residential life.

25. The college hostels in the mufassal are, generally speaking, more satisfactory than those in Calcutta. In many of the mufassal towns which we visited we saw attractive and well-supervised hostels. Those of the Wesleyan Mission College, Bankura, seemed to us admirably suited for the purpose, while the supervision was well-conducted. At Mymensingh there are separate hostels for Musalmans and Hindus; and these are enclosed in the same compound which is walled and levelled. There is plenty of space for games. At the Hindu Academy, Daulatpur, the students' residences have been economically built with mat walls on a wooden frame work. Those of our members who visited Gauhati were much attracted by the hostels of the Cotton College. These were of a single storey, built in parallel ranges, surrounded by gardens, with kitchens at a distance. The rooms were clean and well-kept; a common room and quarters for a superintendent were included in each range.

26. The residential arrangements at the Muhammadan Anglo-Oriental College, Aligarh, have been developed with such thoroughness that we draw attention to the description of them by Dr. Wali Mohammad in answer to Question 17.

27. Turning to inter-collegiate hostels (*i.e.*, hostels which are not limited to students from any single college) we select for special mention those maintained by the Oxford Mission at Calcutta and Dacca and by the Baptist Mission at Dacca, and the Y. M. C. A. hostels; and the Baker and Elliot hostels for Muslim students in Calcutta. There are also in Calcutta a Buddhist hostel and an Oriya Law Students' hostel, the character of which is sufficiently indicated by their names. We took the opportunity of visiting several of these hostels which, for the most part, are characterised by their admirable management and their attractive buildings. Several of them provide single rooms for students and facilities for social recreation.

28. A different type is represented by the Victoria Hostel at Madras. It accommodates about 300 students drawn from a number of colleges. Its large red brick building stands behind the Presidency College, near the sea and with plenty of open space all round. A professor of the Presidency College acts as warden and lives in an adjoining house. There are also a sub-warden

and a sergeant who look after minor matters of discipline. Students of all castes and sects live in the hostel, and are grouped into a number of messes which they manage themselves.

V.—Description of messes, licensed (attached or unattached) and unlicensed.

29. Competent observers have told us that in many messes the conditions of life are highly detrimental to the health of the inmates.

“Students,” says Mr. Holland,¹ “have been housed in conditions insanitary and unhealthy beyond words. Oppressed by poverty they have gone straight for the cheapest, and therefore the worst lodgings they can find. Puny in physique, huddled together, without recreation or healthy exercise, in the slums of Calcutta they have tended to become stunted and overstrained in body with a nervous system often reduced to hysterical conditions.”

The Rev. W. H. G. Holmes of the Oxford Mission² confirms this opinion :—

“The houses in which they mostly live are in the congested parts of the city, the rooms are filled to their utmost capacity ; the staff of servants is inadequate ; the rooms and passages and staircases are generally dirty and sometimes filthy, whilst the sanitary accommodation is in an indescribable state.”

We have seen messes in Calcutta and in other parts of Bengal which justify these descriptions.

30. As a rule, messes are accommodated in buildings which have been designed for family use and are therefore ill-adapted to the special needs of a student community. In a well-planned hostel, every student, or each small group of students, has a separate room, larger apartments being provided for common use at meals or at times of recreation. In a converted dwelling house, the rooms are generally of different sizes, some being too large for individual occupancy and perhaps none large enough to serve as common rooms for a body of students. In most cases, however, it is possible to contrive sufficiently convenient arrangements, but this is precluded by the inability of the University through lack of funds to engage in leases of more than a year’s duration.

¹ Question 1.

² Question 17.

31. The Government of India have discouraged the use of hired houses for residential purposes, and have issued the following instructions :—

“ While the position is tenable that house rent should be regarded as the equivalent of initial outlay, the Government of India are unwilling to countenance any practice which would tend to perpetuate the utilisation of hired houses as opposed to buildings specially erected for hostel purposes ; and a system of messes, where the supervision exercised must necessarily be of a less complete nature, does not commend itself to them save as a provisional arrangement. The Government of India are accordingly unable to approve the payment of rent by Government for hired houses which are used as messes, although there is no objection to the continuance of the aid which, it is understood, is at present given by the local Government through the University to a scheme for provisional messes in Calcutta and Dacca. They are also unable to approve the payment of rent by Government where such houses are used as hostels save where no hostel of a permanent nature (not excepting such a hostel already full) is available. And in the latter case they consider that not more than one-half of the rent should be defrayed by the local Government. Cases, however, will doubtless arise where Government may reasonably pay the full rent, e.g., where houses are hired as hostels for girls, children of the backward classes, etc. The Government of India desire that the local Government should use their discretion in such cases. In cases where houses are used as hostels and rent for them is defrayed by the local Government beyond the limits laid down in the present letter, and where a sudden change would produce hardship, there is no objection to the continuance of the payment of rent from provincial revenues for a reasonable time. But it is hoped that such cases will be few ; and it is thought that this concession should not be extended beyond a fixed period of time.”

Without assistance from Government neither the University nor the colleges had the funds which justified them in renting houses as attached messes on long leases. And thus, as the erection of hostels was very expensive and could only proceed slowly, the effect of the instructions of the Government of India was to increase the number of messes which were unlicensed and unattached.

32. In a mess, because there are no continuous traditions of discipline and companionship, it is less easy than in a hostel for students to feel *esprit de corps*. But an attached mess stands in a special relation to a single college to which the members of the mess share a common allegiance. And it is now not unusual for the same premises to be hired year after year for mess purposes, though for changing groups of students. In effect, the attached mess may be a good, though small, collegiate hostel, but there are very few which have attained as yet this standard.

33. In regard to the unattached mess, there is an almost united chorus of disapproval. We have learnt that its buildings and surroundings are usually squalid, its supervision generally nominal, and that its influence weakens or impairs the college ideal. It is true that some of those whom we have consulted put forward the pleas that unattached messes allow students who come from the same village or district but are at different colleges in the same town to live together, and that the practice of making independent arrangements for house-keeping develops a capacity for self-help. But so far as accommodation is concerned, we have found that, though some unattached messes are tolerably housed, a large proportion of the whole number are in unsuitable premises and surroundings.

34. In 1916-17 as many as 1,896 students in Calcutta were living in unlicensed messes. It is in these residences, subject to no inspection whatever and unrecognised by the University, that the grave abuses to which we have just referred are more commonly found. Some of our number have visited unlicensed messes in Calcutta and have reported them as most undesirable for students' residence.

35. Unlicensed messes are also used by students in the mafassal. One of these, visited by two of our number, consisted of a very dirty mat hut exposed to wind and wet during the rainy season. Another was separated only by a tank from a couple of brothels. These may be unhappy exceptions, but very many of the unlicensed messes which we have visited seem to us anything but suitable residences for students.

VI.—Difficulties of commissariat in hostels and in messes.

36. We have received many complaints from our correspondents and from the students themselves about the cooking arrangements in the hostels and messes. Mr. W. H. G. Holmes¹ has told us that—

"the difficulty of getting efficient cooks is great, and the cook is therefore an unmanageable despot. Lectures begin at 10 or 10-30 in the morning, and breakfast, perhaps the largest meal in the day, is served close to the hour. The students hurriedly bolt their food and rush to the lecture. Indigestion and anaemia result. When breakfast is still late, as infrequently is, they gobble down some sweets."

¹ Question 17.

Dr. Brajendranath Seal¹ refers to the practice of the ~~value~~ bearer filling his *kalsi* or *moshak* from any horse pond on the ~~value~~ and speaks of the cook as " lord of the kitchen and master of the mess.... Anyone who can solve the cooking problem in the messes will be a greater benefactor of our students than are ~~value~~ building and text-book reformers put together. Over-grown hostels are hot-beds of faction ; the mutual recriminations of the boarders, cooks, menials and petty functionaries are vulgarising to a degree." Dr. Rames Chandra Ray² draws attention to bad cooking, adulteration and pilfering which characterise privately managed messes. In his report, Mr. Gilchrist³ points to yet another cause of disorder.

" Many superintendents of messes complained very bitterly of the way in which the menial establishments of the messes are organised. It seems that at present many servants in the messes are the direct servants of the students, the superintendent having very little control over them. It is almost needless to remark on the absurdity of this arrangement."

37. Where the supervision is good, there does not seem much cause for complaint. At the Cotton College, Gauhati, for example, we were fortunate to visit the hostel at the time when the midday meal was being prepared and noted the orderliness and cleanliness which prevailed. Unfortunately, the supervision is usually defective, and therefore we do not feel that the criticisms passed by our correspondents are in any way overdrawn. The difficulties, however, are enormous. Many of the buildings are ill-adapted to the requirements ; the students are usually too poor to pay for better service and food. Caste restrictions add further complications.

38. Our correspondents are divided as to the remedy to be adopted. Some feel that the feeding arrangements should be in the hands of the students. Sir Gooroo Dass Banerjee¹ suggests that " the internal management of the messes should be left to the students under proper supervision, so as to give them training in the management of their own affairs." Dr. Brajendranath Seal¹ holds similar opinions and suggests that such arrangements will lower the cost and keep the (normal) discontent within due limits. Mr. A. H. Harley and Khan Bahadur Aminul Islam¹ state that such a system obtains in both the Madrassah hostels and that a

¹ Question 19.

² Question 17.

³ General Memoranda, page 281.

consensus of opinion is in favour of its continuance. Similar arrangements are made in other provinces. Mr. T. Cuthbertson Jones, Principal of the Agra College,¹ finds that the best plan is "to permit the students to form their own messes and provide their own cooks and food, giving them only kitchens and cooking utensils." He adds:—"in my own hostels the students have a co-operative society² for the purchase of food and are enabled thereby to buy good food at less than the ordinary market rate."

39. Others of our correspondents, however, disapprove of thrusting this responsibility upon the students. Mr. Holmes¹ feels that—

"the time and anxiety occupied in the management of servants and food adds to the already more than sufficient burden of the students. The nomination of a senior student or a graduate as superintendent of the mess in no way lessens the objection to the mess system, for he has neither the time nor the authority really to superintend."

The experience of Dr. Watt¹ and his colleagues at the Scottish Churches College tends in the same direction.

"After experience of various forms of management in regard to the board of students in hostels, we consider that the most satisfactory results obtain from a system in which the superintendents make all arrangements for food and have sole control of all hostel servants. With a mess committee in a hostel continual difficulties arise which increase rather than facilitate the work of a superintendent, and from the experience gained in our hostels we should say that students infinitely prefer the present system."

Dr. Watt also urges that the expense is usually higher in a mess supervised by students than in a hostel under the charge of a superintendent.

VII.—*Other aspects of life in hostels and messes.*

40. Several of our correspondents contend, though not, we think, with justification, that many of the hostels are built and equipped on too lavish a scale. We quote as an example of such extreme criticism the words of Mr. Umacharan Banerji¹ that "it is not at all clear why splendid palaces fit for the accommodation of rajahs, maharajahs and nawabs should be built for the housing of students who mostly come from the poorer sections

¹ Question 19.

² This system, which is explained at greater length in an interesting note submitted by Mr. Willoughby, is worthy of consideration, (Question 19). The Canning College, Lucknow, has a similar co-operative society; and very recently St. Paul's and King's Colleges in Calcutta.

of the middle classes, and the incomes of whose guardians do not usually exceed even Rs. 100 a month." The Rev. T. E. T. Shore in his comments on the proposals for a University of Dacca thinks that¹—

"the present tendency is to equip colleges with buildings altogether out of proportion to the standard of living in the classes from which the bulk of the students is drawn. Habits of extravagance are thus formed and encouraged, often with disastrous results. The ancient tradition of Indian scholarship was one of 'plain living and high thinking,' and the student period of an Indian's life was designed to be one of strictness and even austerity. Some return to this ideal is greatly to be desired.... For the residential quarters of the students, a much simpler style of building should be adopted, which would be more hygienic, very much cheaper, and could easily be made very attractive in appearance."

41. We had the opportunity of discussing this point of view with Mr. Shore who advocated a type of hostel consisting of a one storied building with a concrete plinth, iron frames, a tiled roof and walls of mat. There would be a verandah which would keep off the rain, and single rooms opening out from it. The Oxford Mission school boys at Barisal are housed in buildings of this nature, but the Mission buildings have been razed to the ground more than once by cyclones. At Cooch Behar we saw similar buildings which had a neat and tidy appearance. But the principal told us that, in his opinion, the temporary building was by no means an economy in the long run. Owing to the space required and for other reasons buildings of this type could not be erected in Calcutta.

42. We are in the fullest sympathy with the desire to make hostels as simple and unpretentious as possible. But it must not be forgotten that in Calcutta owing to the high price of land it is necessary to get the maximum of accommodation on to the available space; and for that reason solid and lofty buildings are necessary. And having visited most of these 'palatial' hostels, we can assert with confidence that it is difficult to conceive anything more Spartan than the conditions which they provide. Indeed, so far as our experience goes, the conditions in Bengal are more Spartan than those in other provinces which we have visited.

43. In hostels or messes the bathing and latrine accommodation is often deficient. Few of the hostels, and scarcely any of the

¹ Question 4.

messes, have a sick-room. The lighting of the rooms is often exceedingly bad. Except in the rare cases where there is electric light, the students are apt to injure their eyesight by using dim and smoky lamps. The furniture in most of the rooms is scanty. Instead of finding any trace of luxury, we saw only the bare necessities in the great majority of students' rooms in Bengal. A wooden bedstead, in most cases a chair, a shelf for books and a few pegs for clothes are the only articles of furniture for each student. In many cases one room is tenanted by as many as eight students.

44. It is under these conditions and in bed-rooms thus furnished that the students have to do the bulk of their work. Our correspondents criticise severely the absence of common-rooms in the hostels and messes. There are exceptions, as for example at Serampore. But most of the hostels and messes which we have visited have no such advantages. Mr. Gilchrist¹ who inspected the messes in Calcutta in 1914, had the same experience.

"Very few messes at present have any facilities for the cultivation of the social part of student life. In most messes practically every available corner is taken up by students' seats, or (more literally) beds. There was a lack of even ordinary periodicals."

45. A very weak point in some hostels and in many messes is the superintendence. In many of the hostels the superintendents are members of the college staff, although often only junior members. But in the messes we find the most various types of superintendent, of whom the majority are inadequate for their task; and in many cases supervision seems to be purely nominal. In 1914, Mr. Gilchrist² noted that most of the superintendents of unattached messes were students, a fact confirmed by our evidence. A student in a mess was asked, "What would happen if you come in late?" "Nothing," he replied. "Will not the superintendent report your absence?" "Oh, no," was the answer, "he is one of us."

46. Even good superintendents do not often get a fair chance; and this for several reasons. In the first place, it is impossible to expect one man, however keen and capable, to look single-handed after a large hostel of 100 or 200 students. But this arrange-

¹ General Memoranda, page 280.

² *Ib.d.*, page 266.

ment is as common as it is inept. Frequently, again, we have found that there are no proper quarters for the superintendent in the hostel. With the best will in the world, it is difficult for a teacher to see much of the students in a hostel when he lives a mile or two away from them. The lack of married quarters in most hostels and messes prevents any married professor from accepting the position. Further, in many of the private colleges especially, the teacher is so overburdened with lectures that he has not much energy or time left for the adequate performance of his duties as superintendent. Nor is there any financial inducement for him to take his hostel duties seriously. The usual pay of a mess superintendent varies from Rs. 8 to Rs. 25 per mensem, which is quite inadequate to get the right kind of men. Many suggestions have been made to us for reorganising the system. Among these, we should mention the scheme advocated by Sir Rash Behary Ghose¹ and a few others for a university service of hostel superintendents, consisting of men of a missionary type. We make suggestions on this point in a later chapter².

47. There is a general consensus³ of opinion that the hostel is the best form of residence for students who are not with their parents or near relations. And the reasons for this preference are plain. The hostel is usually a building specially designed and erected for the purpose. The rooms are therefore conveniently arranged, with, as a rule, plenty of air and light.⁴ Sanitation is comparatively satisfactory. There is some attempt at superintendence. Corporate life is not altogether absent, many hostels being large enough to have clubs and societies of their own.

48. Each type of hostel has its special advantages. The collegiate hostel is the type recommended by the majority of our correspondents; and, since it is attached to a particular college and is subject to the control of the college authorities, it has a greater chance of developing a corporate consciousness and an *esprit de corps* of its own. It fosters college fellowship and renders supervision comparatively easy. If colleges are to be the unit of university

¹ Question 19.

² Chapter XXXIX.

³ Question 17, *passim*.

⁴ There are some exceptions; many of the rooms in the Hardinge Hostel attached to the University Law College are very dark and gloomy.

life, it follows that the hostel must normally be an integral part of the college.

49. At the same time, the inter-collegiate hostel is a very useful, and often an admirably managed, institution. Provided that hostels of this type do not supplant the collegiate hostels, we heartily approve of them. They meet a need. Apart from the fact that they absorb the overflow from college hostels, they are able, because they can select their students, to provide special conditions of life in accordance with the needs of a particular community. While we attach weight to the judgment of those experienced correspondents who hold that, in Calcutta at all events, caste hostels are not necessary, we find that many of those whom we have consulted think it desirable to house separately Musalmans and Hindus, and that the backward sections of Hindu society may most conveniently be grouped in distinct hostels. Moreover, though there is great force in the argument that the intermingling of students of different races and beliefs in the same hostel (with separate feeding arrangements, if necessary) may be a valuable element in the experience of university life, many students attending university and college courses gain from living in a hostel of which the atmosphere is wholly congenial to their religious traditions and beliefs. If, for example, a religious community like the Buddhist has but few adherents in any one college, there are advantages in an inter-collegiate hostel which unites them with their fellow believers under conditions of residence consonant with the practice of their faith. Furthermore, there is a good deal to be said for a hostel which gives harbourage to many youths who are linked together by home ties through having come from the same locality.

VIII.—How the residence of students is supervised and controlled.

50. The supervision and control of students' residence are difficult problems in every part of Bengal, but especially in Calcutta. In that city in 1916-17 there were no less than 15,018 students in attendance at the University. A table of statistics¹ prepared by the university authorities and forwarded to us by the Government of India shows that of this multitude nearly a third (4,584, or 30.5 per cent. of the whole number) were known to be living

¹ See table on page 334.

under conditions which the University did not approve.¹ The number living with guardians unapproved was 656; the number living in unattached messes not approved (*i.e.*, unlicensed messes) was 1,896; the number living with relations not approved was 2,032. It should be remembered that no inconsiderable proportion of the 15,000 students were boys under seventeen years of age.

51. The problem is serious in the mufassal also. The Rev. Hedley Sutton² of Mymensingh, who has had a long experience of student life in Eastern Bengal, tells us that in recent years the authorities of his mission found three students of the local college living without any supervision in a small house which they had rented because they could not find accommodation with any family in the town. Even when students are under guardianship the control is sometimes nominal. Mr. Sutton illustrated this by the case of some boys attending a high school who were living in a small hut attached to a workshop belonging to their 'guardian,' who himself lived more than half a mile away. So loosely interpreted were the responsibilities of guardianship that a college student who was living a mile and a half from the mission house came to ask the missionary to sign as his guardian, and evidently expected his assent, although the latter could have exercised no close supervision over the youth's movements. Rai Lalitmohan Chatterjee Bahadur,² of Dacca, describes a not unusual state of things when he writes that the guardianship exercised by the master of the house in which students live and eke out their income by giving private tuition is 'sometimes only nominal.'

52. This then is the first difficulty—the vague and elastic meaning given to the term 'guardianship' by some of those who, in order to satisfy the university regulations, assume its responsibilities in respect to a university student. "The 'so-called 'guardian' system,'" writes Dr. Gray,² "is in numerous cases a farce." Mr. Sutton² says the same: "The meaning of guardianship is not understood; in many cases the guarantee as to supervision carries with it no responsibility on the part of the man who contracts

¹ Some of these were students at the University Law College or in the University post-graduate (arts) classes, but the more advanced age of these students extenuates the breach of the University's own regulations.

² Question 17.

to act as guardian." An aggravating feature is the fact that it is impossible always to accept without question the returns submitted by students, even in the case of those who state that they are residing with parents and guardians. This difficulty was clearly foreseen by those who framed the regulations, which provide for the punishment of students who make false declarations in respect of guardianship. It is very frequently the students, and not the parents, who make arrangements for residence and even sign the declaration forms.

53. The second difficulty is the lack of hostel accommodation. To show how perplexing the question is and what embarrassment it must cause to the college authorities, we invite attention to the table of statistics, on page 334 below, in which the University set forth the numbers of its students who were residing in Calcutta in 1916-17 and were living either with relations or guardians or in hostels or messes. It will be seen from this table that, apart from 7,056 students who were living with approved relations or guardians, and presumably were looked after with care, only a little more than one out of every three of the other 8,000 young men (2,874 or 35.6 per cent.) were accommodated in hostels, whether collegiate or inter-collegiate, or in attached messes.

54. We have said that those students are presumably well cared for who live with approved relations or with approved guardians. The question, however, suggests itself whether the word 'approved' means in reality as much as at first sight appears. A glance at the table will show that at the Bangabasi College none of the relations with whom the students were living are returned as approved. At the Vidyasagar College, on the other hand, none of the relations are returned as 'not approved.' If the distinction between the words is real and if the statistics given in these two cases were based upon the results of inquiry into the circumstances and were not simply of a provisional character, it is singular that the Bangabasi College had felt it right to take exception to more than a thousand of its students' relations, while the Vidyasagar College, though nearly thirteen hundred of its students were living with relatives, had no reason to disapprove of any. This indicates the difficulty which arises from the indefiniteness of the meaning of the 'approval' which is bestowed by college principals.

Name of college.	NUMBER OF STUDENTS LIVING IN		NUMBER OF STUDENTS LIVING WITH		TOTAL.		Percent- age of students living with relatives and guardians.	
	COLLEGE HOSTELS.		NON-COLLEGE HOSTELS.		GUARDLINES.			
	Attached mess.	Approved.	Attached mess.	Approved.	RELATIVES.	Approved.		
1. Presidency College, Calcutta	294	30	36	3	585	30	42.8	
2. Scottish Churches College, Calcutta	34	49	49	0	714	33	38.0	
3. St. Xavier's College, Calcutta	303	3	..	..	490	6	21.2
4. St. Paul's Cathedral Mission College, Calcutta	160	2	..	..	54	..	28.3
5. Vidya Bhawan, College, Calcutta	28	65	60	..	1,204	71	6	
6. Bishop College, Calcutta	15	172	33	335	1,774	76	10.0	
7. City College, Calcutta	110	167	35	249	794	1,055	1,483	
8. Pabna College, Calcutta	20	165	21	233	202	38	37.0	
9. Central College, Calcutta	..	1	10	63	..	33	23.0	
10. South Suburban College, Calcutta	72	6	117	63	162	10	6.0	
11. University Post-Graduate (Arts) Classes, Calcutta	72	..	..	..	..	600	61.3
12. University Law College, Calcutta	228	37	259	107	351	103	27.6	
13. University College of Science, Calcutta	21	1	48	48	290	607	31.5	
14. Medical College of Bengal, Calcutta	..	..	..	..	..	..	0.0
15. Behnoria Medical College, Calcutta	..	..	..	..	..	..	0.0
16. Civil Engineering College, Silpuri	82	..	..	..	1	10	24.1
17. Sanatik College, Calcutta	23	2	1	23	153	10	59.3	
18. Riven Law College, Calcutta	17	33	23	18	61	30	42.0	
19. Loreto House, Calcutta	8	..	1	..	..	8	10.0
20. David Hare Training College, Calcutta	12	2	..	..	7	..	25
21. L.A.S. Teachers Training College, Dharwadpur, Calcutta.	6	..	..	..	..	..	35.7
GRAND TOTAL	1,228	403	1,184	903	1,804	6,487	42.0	

upon the proposals for responsible guardianship submitted to them in accordance with the regulations of the University.¹

55. Another difficulty arises from the fact that the time within which arrangements and inquiries as to the residence of students have to be made by the college authorities is extremely limited. The results of the two examinations on which most college admissions depend—the matriculation and the intermediate—are only published just before the beginning of term. Indeed, the matriculation results in 1918 were only announced a week before the colleges were expected to start work. The first two or three weeks of the term therefore are occupied mainly with the task of arranging admissions ; and the mufassal colleges are still further delayed and embarrassed in drawing up their admission registers by having to await the rush of disappointed students from Calcutta. It is impossible for a large proportion of the students to make their arrangements beforehand ; for they do not know, in the first place, whether they have been successful in their examinations ; and in the second place, whether—even if successful—they will be able to gain admission to a college. In order to minimise their chances of disappointment, they naturally apply to several colleges, thus further complicating the arrangements of college principals. Cases are known in which the same student has been admitted to as many as three colleges.

56. Some of the smaller colleges may be able conveniently to make inquiries from new students about their proposed places of residence at the time of admission. But such a procedure would be beyond the power of the larger colleges, which at the beginning of the college year are overwhelmed by applications, mainly in person. In the scramble there is no time to inquire closely into the arrangements which each student proposes to make as to his residence. Admission has to precede such inquiry, instead of such inquiry preceding definite admission.² The result is that instead of the college making immediate inquiries upon the basis of the information as to his intended residence which every student has to provide when he applies for admission, investigation is deferred, admission granted, and the suitability of the student's residence is not ascertained until term is well

¹ For regulations see para. 14 above.

² As recommended in the Dacca University Committee Report.

advanced and often, until through intervening changes in the student's plans, some of the information has already become obsolete.

57. The actual procedure which the University follows in attempting to secure compliance with its regulations is described in Mr. Gilchrist's report.¹

"Before the colleges close for the summer vacation principals of college are asked by the Students' Residence Committee to furnish an estimate of students likely to reside in attached messes in the coming academic year. On this estimate as a basis the Inspector of Messes proceeds to make arrangements for the housing of the students. Leases of houses are renewed, and new houses, if required, are engaged during the vacation. Everything being satisfactory, the lease is signed and the inspector proceeds to measure the rooms and allot seats, according to a certain standard of cubic space. A few days before the colleges reopen after the vacation, the houses are made over to the college authorities for occupation by students.

Before leases are made, the Students' Residence Committee must be satisfied on three points:—

- (a) the sanitary condition of the house;
- (b) the situation of the house as regards the college, i.e., whether the house is near the college or not; and
- (c) the suitability of the neighbourhood.

The medical member of the Students' Residence Committee decides the first of these points, the Inspector of Messes reporting on the second and third heads.

Within a month or six weeks after the commencement of the session applications are made by the principals of colleges to the Registrar of the University for licences to their respective attached messes. In these applications measurements of the rooms, the names and qualifications of superintendents or assistant superintendents and any other relevant details are given. Licences are required alike for attached and unattached messes, and non-collegiate hostels. In the case of unattached messes the principal of any college may forward the application and for non-collegiate hostels (like the Oxford Mission Hostel) the application comes from the superintendents. These applications are considered by the Students' Residence Committee who grant or refuse licences according to the reports of the University Inspector. The proceedings of the Committee are subsequently confirmed by the Syndicate.

The Inspector of Messes during the term pays visits, of which no previous notice is given, to the attached and unattached messes and to the non-collegiate hostels; and if he finds any irregularities he reports them at once to the principals of colleges. Such irregularities are—

- (a) omission to call the roll;
- (b) lack of proper entries;

- (c) harbouring outsiders such as clerks, non-university students and business men;
- (d) the absence of superintendents from the messes without notice."

58. On paper the regulations are excellent. In practice, for the reasons given above, they fail to meet the needs of the situation. The majority of colleges, especially the very large colleges in Calcutta, can exercise little more than nominal supervision. The Vice-Principal of Vidyasagar College informed us at the time of our visit that a junior member of the staff was told off to supervise the residence of students. But it is clearly impossible for this officer, even with the assistance of a bicycle, to approve within the space of a few weeks the 1,294 relatives and 74 guardians with whom students of the college are stated to be residing, as well as to investigate the cases of 272 students who are living in unattached messes. Still further complications are introduced when, as often happens, students change their places of residence during the course of the year.

59. A few of the colleges have done all that is possible in the circumstances. When we visited St. Paul's Cathedral Mission College, for example, the principal explained to us that all his day students are divided into groups, each group being placed under a professor whose business it is to make the necessary enquiries in regard to the residence of those under his care. The principal of Krishnagar College told us that a special sub-committee of the College Council investigates each case and reports to the principal. Colleges also, such as Presidency and Scottish Churches, which rarely include 'failed' students from other colleges and whose students usually remain with them throughout their course, have been able to carry out their duties fairly satisfactorily.

60. It is especially difficult to supervise the residence of students in unattached messes. The number of students in this type of mess has increased very rapidly. In 1911 it was 357; in 1916-17 the number had risen to 2,297. The popularity of these messes is ascribed to various causes. Some maintain that the unattached mess is cheaper than the other kinds of residence, but Mr. Gilchrist has shown in his report that this contention is not justified so far as Calcutta is concerned. Students of different colleges and of the same caste or district find it convenient to live together. Some students again may value the independence and the lack of supervision which characterise these messes. And many students have no

choice in the matter. It is to the unattached messes that those who do not live with relatives or guardians and cannot find accommodation in the hostels or in the attached messes are practically compelled to go. Not only do the numbers of the unattached messes make their systematic and periodical inspection difficult, but the duty of inspecting them is unpalatable. Mr. Gilchrist explains the reason.

"Professors of colleges are naturally disinclined to interest themselves in messes in which perhaps they know only one or two of the students, whilst the other students may not appreciate the visits of professors of (foreign) colleges. As a matter of fact, the unattached messes are not visited to any extent by professors. The students are left absolutely to themselves. I was told directly that professors refuse to visit these messes because, not being known to the students in the mess, they are not made welcome, and due respect is not shewn to them. The only restraining influence on the unattached mess is a periodical visit by the inspector of messes, and that restraining influence can be very slight, because the inspector cannot possibly visit these messes very often."

61. The responsibility for compliance with the regulations as to students' residence rests upon the colleges. They were plainly reminded of this fact by the University in 1916 in the following circular letter:—

- (a) The obligation rests entirely upon the authorities of each college to ensure that every student who does not reside with his parents or other legal guardian, or guardian approved by the principal, does reside either in the college or in lodgings approved by the college.
- (b) The further obligation rests upon the authorities of each college to ensure that this condition as to residence is fulfilled, not merely at the time of the admission of each student into the college, but also during the entire period during which the student continues to be a member of the college.
- (c) The University is under no obligation to provide a college with suitable residences for students out of university funds; the University has only undertaken, at the request of the Government, to make available to Calcutta colleges suitable residences for their students as far as practicable within the limits of the Government grant."

62. The alternatives before the colleges are disagreeable to those of them which depend upon large numbers of students for the prosperity of their finances. They know that not all their students could find accommodation or guardianship under conditions which on strict inquiry would be approved. If therefore the

very large colleges were to choose the first alternative and turn away every student for whom approved residence could not be found, their receipts would fall and their profits disappear. If, on the other hand, they turn a half-blind eye to the regulations, they put themselves in the wrong, and must have twinges of conscience when they receive such an official letter as was addressed to them by the University, also in June 1916 :—

" Every student reading in an affiliated college with the object of appearing at an university examination who does not reside with his parents or other legal guardian or guardian approved by the principal of his college is required by the university regulations to reside in a collegiate hostel or non-collegiate hostel or an attached mess or un-attached mess. No student is permitted to reside in a private mess not recognised by the University. This condition as to residence must be fulfilled not only at the time of admission, but during the whole period that the student continues to be a member of the college. Every change of guardianship or change of lodging must forthwith be reported to the principal. If a student makes a false declaration in respect of the guardianship under which he is living or is found to be residing in a private mess or otherwise in contravention of the regulations, he will be deemed guilty of breach of college discipline and will be dealt with accordingly."

63. These colleges urge that, if they closed their doors to hundreds of students, many boys eager for university education would have nowhere else to go. But the fact remains that by overcrowding their lecture-rooms they are spoiling university education in Bengal. They may feel some satisfaction in pointing out that the University is not immaculate in its observance of its own regulations. But in justice to the University we must remind ourselves that the students at its Law College and in its post-graduate classes are none of them immature boys. The University itself is in an embarrassing situation. It is bound in duty solemnly to remind the colleges of what they are bound to do. But, if they fail to do it, what is the University's next step? Nothing short of disaffiliation. And it shrinks from anything so drastic. A few colleges, like St. Paul's, have limited their admissions and honourably insist upon their students residing in accordance with the regulations. But as regards the worst offenders nothing happens. The situation is at present an *impasse*.

IX.—Physical condition of students.

64. Much of the evidence which we have received throws an unfavourable light on the health and physique of the students.

Many of our correspondents deplore the neglect of the body in education, and the resulting physical weakness and ill-health. The opinions cited below are comparatively definite and detailed.

65. A careful, though limited, investigation made in July-September, 1916, by Messrs. Rames Chandra Ray,¹ R. N. Chatterji and D. Ghosal into the physique of boys in three variously representative schools in Calcutta gave disquieting results.

This examination "evoked," we are told, "an under-current of mixed feelings among the scholars, their guardians and the school teachers. The teachers were silently mutinous; the guardians were full of suspicion and contempt in the beginning but showed the utmost unconcern after the examinations had begun." Of the 703 boys examined (their ages ranging from 7 to 19) 42.2 per cent. were found to have defective vision, 26.1 per cent. having both eyes defective, 28.16 per cent. had carious teeth, 41.39 per cent. enlarged tonsils, 31.28 per cent. polypus in the nose, 3.97 per cent. defective hearing, 15.2 per cent. were scrofulous and 13.3 per cent. were offensively unclean.

66. In the written evidence of Dr. J. H. Gray¹ the following passage occurs:—

My observation, belief and experience . . . is that the health and physical development of a large majority of students during their university career becomes steadily poorer. The men of the first year class are as a whole better than the men in the B.A. class, or better than they will be again during their university career. It is unfortunate that actual statistics are not available but when the request to make such an investigation was presented, we were given to understand that public opinion would not approve of such an examination of students, and the matter was dropped."

67. The Rev. W. H. G. Holmes¹ thus records the outcome of his experience. His work, though not officially connected with the University, has brought him into intimate association with hundreds of students during the last fourteen years:—

"Students who come from villages to Calcutta comparatively robust, after a year or two in Calcutta become frail, anaemic, dull and listless. Ninety per cent. take no milk at all in Calcutta, whilst in their villages most of them drink daily a seer of milk or so. They increase in weight rapidly during the vacation when they are out of Calcutta. The chief complaints they suffer from are dyspepsia, pulmonary phthisis (often of the galloping type), melancholia, due to constant worry, and general depression of body and mind."

68. The Rev. W. E. S. Holland,¹ who has had long intimacy with Bengali students, both in Allahabad and Calcutta, draws a perturbing comparison:—

"I have lived for thirteen years among students in Allahabad, and for five years among students in Bengal. I have been much impressed by the

deplorable inferiority in physique of the Calcutta student. Bengali students in Allahabad were much more robust. The difference in health conditions is even more striking. Illness was uncommon, serious illness very rare, in our Allahabad hostel of 100 students. Here there is seldom a day on which half-a-dozen students, generally many more, are not absent from our college through fever..... The spread of consumption among students is alarming."

69. Others of our correspondents speak more generally on the subject but in no less serious a strain. Dr. Hassan Suhrawardy¹ asserts that students are generally of poor physique, ill-fed and ill-nourished.

"Robust youths," writes Mr. Bimal Chandra Ghosh, "break down at the end of the six years or a few years after. Many a bright youth of eighteen in the intermediate class breaks down in the fourth year and some drop out altogether. That graduates of Indian universities seem to 'fade' after their academic successes is due to this strain."

70. The argument that education in Bengal overtaxes the body is commonly advanced. Mr. Justice Abdur Rahim¹ feels that the present system of university education imposes considerable strain on the student, not only in Bengal but all over India, and that the physique and energy of the educated classes has greatly suffered in consequence. Dr. Abdurrahman¹ attributes to the overpressure of examinations the physical degeneration of many educated Indians.

71. Whatever substance there may be in these conjectures and generalisations, it must be acknowledged that in many ways the present system of education is detrimental to health. The pressure arising from the examination system and from the use of a foreign medium of instruction are contributory factors which are discussed in Chapters XVII and XVIII of this report.

72. The hours of study, both in school and college, have also been subjected to serious criticism by our correspondents. Dr. Rames Chandra Ray² considers that the hours of study at school are too long and too continuous. He suggests that the school hours might be from 7 to 10 in the morning, after which the boys would take their food. This meal might be followed by another school session and then by recreation. Dr. Brajendranath Seal³ makes similar observations and regrets the change from the old custom of morning and afternoon hours of work with an intervening rest in the midday heat, which was adapted to the climate.

¹ Question 18.

² General Memoranda, page 101.

³ Question 17.

73. And, behind all this, is the pressure of public opinion and the attitude of parents. "Guardians," writes Dr. Rames Chandra Ray,¹ "as a rule, are prone to expect their full money's worth by having all work and no play." Worn out by financial worries and debt and spurred on by the natural desire that their sons should as soon as possible come to the assistance of the family exchequer, the parents often goad them to concentrate all their energies on the passing of examinations. Three of our correspondents have drawn a mournful composite picture of the 'good boy.' "A 'good boy' in Bengal," observes the Rev. W. H. G. Holmes,² "is one who works well in school, plays no games, comes straight home and, after the shortest possible rest, spends most of the rest of the day reading with a tutor." Mr. Pashupatinath Shastri¹ tells us the fate of the 'good boy.' "If he be a 'good boy' in the class, his position is still worse, because he must keep up his reputation. So the poor student works hard without minding anything else in the world and the result is that his health is ruined." Sir Asutosh Chaudhuri¹ completes the picture by telling us that, in his student days, the good boys were "known by wearing glasses and by their physical weakness."

74. In many cases, again, home conditions are not favourable to robust health. In many parts of the mafassal malaria is general and, in some places, it is acute.

75. Another cause of the poor physical condition of students is the fact that many of them are insufficiently or improperly fed. "The expense of education," writes Mr. Bibhutibhusan Datta,¹ "is so heavy that an Indian father can hardly save a single farthing for the proper nourishment of his sons; many students do not take even a little tiffin in the afternoon after five hours' hard work in the college." Dr. M. N. Banerjee¹ also feels that "the main cause of want of physical development is insufficient nutrition. The majority of the students are poor and ill-fed, and there is very little in their diet to help the growth of bones and muscles. Much less starch and sugar and a little more nitrogenous food would make a great difference in the future of the rising generation." We agree with Dr. Banerjee and with Dr. R. C. Ray³.

¹ Question 18.

² Question 17.

³ General Memoranda, page 161.

that the proper diet of students is a matter deserving of much more expert investigation than has hitherto been given to it.

X.—*Physical recreation.*

76. "Nine-tenths, possibly more, of the students," writes the Rev. W. H. G. Holmes,¹ "take no exercise at all, except that some of them gently swing dumb-bells for a few minutes in the morning." Yet Dr. Gray² has told us that the Bengali student takes kindly to physical exercises. But, since he has had few opportunities of playing games as a schoolboy, he is reluctant to begin them as a college student; and, being somewhat sensitive to ridicule, he is nervous of playing games in which he is inexperienced and incompetent. This is all the more to be deplored, because healthy recreation is a safeguard, not only against physical breakdown, but against mental and moral aberrations. Dr. R. C. Ray³ writes:—

"Greater attention to sports and games, as well as regular physical culture would have the additional advantage of diverting the young men from secret sexual indulgence. My practice among my community, and among the students in particular, has given me frequent opportunities of studying the student from every point of view; and the increasing neurasthenia among our students and men is, to my mind, the resultant of a combination for which a student is not directly responsible."

77. In these circumstances it is unfortunate that facilities for recreation are so scanty in proportion to the needs of the student population. There are few open spaces in Calcutta besides the Maidan, which is inconveniently distant from the college area. Some colleges interpret their responsibilities in the narrowest sense and make no provision for the physical needs of their members; even the better colleges provide facilities for scarcely the tenth part of their students. Conditions are, as a rule, better in the mufassal. But the difficulty does not lie in lack of space alone. There is also a lack of initiative and organisation.

78. Indian games are falling out of use. Mr. Rabindra Mohan Dutta⁴ says that—

"the country games that were suited to the climatic conditions and the native methods of physical exercise which, under our local conditions, were conducive to harmonious development of the body, are now thought out of date and unworthy of polite life."

¹ Question 17.

² General Memoranda, page 160.

³ Question 18.

⁴ Question 1.

On the other hand, English games, such as cricket, football and hockey, require both money and space, which are not usually forthcoming ; and cannot be played by many at the same time. The evil habit of watching instead of playing games is thus formed: "There is plenty of interest in games among the students," writes Mr. Zachariah,¹ "but too often it is the interest of the crowd that watches a professional football match in England, not the interest that induces a man to play himself." Moreover, certain of our correspondents such as Dr. R. C. Ray contend that football is too violent for those Bengali boys who are physically ill-developed and eat ordinary Bengali diet.

79. We have no desire to depreciate the value of English games for Indian students. They undoubtedly afford most valuable training and recreation, but we feel that, alongside of them, there is a need for the development of Indian and other games which are suited to the requirements and limitations of the country. Indian games should be encouraged and any or all games should be introduced which require a small or moderate amount of space and permit a large number of players at one time. Much more development is needed along the lines of the playground of the Young Men's Christian Association in Machua Bazar Street. The area of this playground is very limited ; yet it provides suitable physical recreation every day for many hundreds of students. Calcutta is not unique among the world's great cities in the absence of generous facilities for physical recreation. There is doubtless a need for large expenditure on the purchase of suitable open spaces, but there is an almost greater need for expert guidance and for skill in organisation.

XI.—Medical supervision.

80. The facts which we have cited in the preceding paragraphs suggest that there is need for more systematic and individual attention to the health and physical condition of the student. Often removed at an early age from the supervision of his home and thrown on his own resources, he has no one to watch or advise him and is sensitive in speaking of his ailments to strangers. Dr. Gray¹ directs our attention to several dangers that beset students who

" are turned loose in a great modern city full of vice and allurements, with no one particularly interested in them, and able to keep over them the close, friendly guiding hand that all young men need at this time in their life. It is therefore quite natural that in some cases character and physical health are undermined, and that students resort to drugs, tonics and the false allurements of quack medical advertisements to buoy themselves up."

81. The Rev. Garfield Williams¹ gives a specific example of the need for medical supervision. The prevalence of "eyestrain can be verified by making a visit to a students' mess at night and noticing the light by which he is reading his notes and favourite cram-books, to read which even in daylight would in many cases prove a great strain on the eyes. Medical opinion will also verify the fact that a relatively enormous number of Indian students are using dangerously imperfect glasses, purchased in a bazar, or no glasses at all, where the use of glasses is imperative for health."

82. Many suggestions have been made to us as to the way in which medical supervision could best be exercised. When Dr. R. C. Ray² discussed this matter with us in his oral evidence, he put forward the suggestion of a consultative board of medical advice. Dr. Segard and Dr. Gray³ both recommended a physical education department of the University.

83. At the critical point in many a young man's life, the knowledge that he would be expected periodically to undergo physical examination by an experienced and kindly medical man would exert a bracing and preventive influence. Some of the graver kinds of physical mischief could be averted or cured by the wise advice of an experienced doctor, whose tactful counsel would often be a tonic to the student's power of self-control. Many young men in their college days would be the stronger in will to self-restraint if they could open their difficulties to some older and trusted men, whose knowledge of medicine and human nature would help them out of the self-tortures of a morbid secrecy and protect them against the deceptive remedies of plausible quacks.

¹ Question 18.

² General Memoranda, page 161.

³ *Ibid.*, Pages 163 and 169.

XII.—Narrowness of training.

84. Such are the physical results which issue from a system of education that too often confines its attention to the training of the intellect. But the intellectual training, for which so much else is sacrificed, is in itself narrow and mechanical. Speaking generally, what strikes the observer is the intellectual sterility of the training, the weakness of its actual influence on the mind, its failure to fix its colour deep in the nature of those who receive it. The student is not tempted to range far afield and discover his own intellectual bent; and rarely does he acquire any thoroughness. With little chance of delving deep in his chosen field he finds it even more difficult to pass beyond its bounds and gain interests in men and things which will last him through life.

85. Many of our correspondents have referred to this barrenness of the student's life. Mr. Patrick Geddes¹ alludes to the "starvation of aesthetic, practical, social and moral interests generally, inevitable on any diet of mere knowledge." Mr. Justice Abdur Rahim² confirms this opinion. The educational system has tended to widen the gulf in the student's mind between knowledge and reality, and to give facility in the use of words rather than to train the power of judging the different values of the thoughts which the words symbolise. As one of our correspondents puts it:—

"There is little or no relation between the opinions of a great number of students upon many subjects and their lives. They are constantly expressing ideas upon literary, philosophical and other subjects, not because they believe or even understand them, but because they are the conventional ideas which, in their opinion, are expected. Such falsity in expression must tend to undermine not only the student's powers of mind, but also his character."

In the same mood Mr. Rabindra Mohan Dutta¹ observes that "the existing system does not keep us in touch with the realities of actual life. When we come out of college we find that we are as ignorant of the world before us as if we had never attempted to understand it." And Rai Lalitmohan Chatterjee¹. Bahadur, Principal of the Jagannath College, complains that "the education does not go deep enough for shaping mind and character.... There is very little in his studies to awaken living interest or touch the deepest instincts of a student and so call forth mental effort.

¹ Question 1.

² Question 2.

For example, political and social evolution in India is the most vital concern of young India ; but modern university studies have little bearing on that."

86. The student who desires to read widely and to study thoroughly finds serious obstacles in his path. For one thing, it is very doubtful whether the necessary books will be forthcoming. Poverty usually forbids him to purchase books ; and therefore he must depend almost entirely on libraries. But even so far as the university courses are concerned, the college libraries are, as a rule, inadequate ; and this inadequacy is even more marked in the case of books which are not directly connected with the prescribed courses of study. But the libraries, such as they are, are not used as fully or as wisely as they might be. This is due, partly to the absence of reading accommodation in the libraries, and partly to the lack of experienced advice.

87. In fact, there is little in the life of the college to stimulate the student's curiosity in things beyond the narrow purview of his course. Except in such a case as the Jagannath College, Dacca, where good pictures (the gift of Mr. Nathan) hang on the walls, the lecture-rooms are usually bare ; maps are rarely used even in historical teaching. Except in a few rare instances, there has been little effort to tempt the student from his narrow groove by means of excursions¹ to places of historical and other interests.

88. Nor is there much room or incentive under the present system for the college club or society which forms a characteristic feature of western universities. It is a matter of considerable difficulty to maintain these clubs for any length of time ; and indeed, when we think over the difficulties—unsuitable rooms for meeting, inappropriate times, the meetings having to take place usually at the very close of a long college day, and the lack of financial resources—we are surprised that some of these societies have the vitality which they actually possess.

" The absence of what is known as ' student activity ' or ' class activity ' at American universities," writes Mr. Narendra Nath Sen Gupta,² " is keenly felt by many of us. These activities serve not only to vitalise the community

¹ Rai Mon Mohan Chakravarti Bahadur says :—" Object lessons are not given ; maps are rarely used ; libraries and museums are not shown ; excursions to historical places are not taken ; the current systems of administration are not explained, and important public institutions in the city are not visited." (Question 16.)

² Question 1.

of students, but also to counteract the effects of academic aloofness and academic intellectualism. We must not forget that one imbibes a *lot* of culture from the tradition of the University than from its lectures; and a healthy tradition is merely an outcome of the corporate life of the University. Hence it is one of the basic conditions of a healthy cultural life that there should be other organisations and activities besides those that meet only the intellectual demands, among the members of the University and its constituent colleges. These clubs and societies that guide the course of university life spring up by themselves under normal conditions. But the students of Bengal have come to stake a high premium upon intellect on the ground that a first-class career at the University almost always ensures a bright financial prospect. Thus 'academy has stifled life', and we have at the University a large number of students whose only companion is the text-book and whose only activity is reading."

89. We have discussed elsewhere the lack of personal contact between the teacher and his students. Perhaps the most serious obstacle in the way of such intimacy is the attitude of parents, of public opinion and of some organs of the press. Instead of assisting the teacher in his difficult and responsible task, the weight of opinion tends in the other direction.

"Parents expect too much from the school and college," writes Dr. Wali Mohammad,¹ "and, by trying to shift on the teachers the whole burden of educating their children in manners and morals, neglect the home training. Sometimes parents even imagine that their interests are antagonistic to the ideals of the college and the university. Hostility, latent or active, develops. Whenever a well-meaning teacher tries to take an interest in a pupil's general welfare, the parents tell him to mind his own business, to teach according to the syllabus and not to bother about the character of the student."

90. This is no new problem in India. In a report drawn up by Sir Alfred Croft² in answer to an inquiry from the Government of India as long ago as 1887 the following striking passage occurs :—

"But there is a further cause beyond the incompetence or the indifference of parents. It is this: that in cases of insubordination the parents or guardians too often side with the boys against their teachers. If it is true (and it has been alleged by many Indian witnesses) that when a parent has sent his boy to school, he considers that he has done his whole duty by the boy and is no further responsible for his conduct, then the least we can expect is that he should support the authority of the teacher to whom he has delegated his responsibility. But this is not always found to be the case. It is too commonly assumed that the pupil must be in the right, the school master in the wrong; the sympathies of the father are given to his idle and refractory son, and the conduct of the teacher is denounced as tyrannical. If school discipline is

¹ General Memoranda, page 408.

² Report on the subject of the Discipline and Moral Training in Schools and Colleges, 1890, page 142.

to be of any value, parents must adopt a more robust and less sentimental attitude in this matter. They should consider that, boys being what they are, it is much more likely that the teacher is in the right ; that in any case discipline and subordination must be maintained ; and that a boy suffers serious harm by being encouraged in a querulous and sullen spirit towards those to whom he owes obedience. It is of the utmost value to a boy in after life to have acquired sensible notions on the subject of discipline while at school. Whoever he is, he will have to obey orders and to submit to authority when he grows up, and he cannot learn that lesson too soon."

91. The attitude taken by some organs in the press towards indiscipline and disorder in colleges is the subject of unfavourable comment on the part of several of our witnesses. The Committee on the Presidency College disturbances in 1916 alluded to "the baneful influence of obviously injudicious discussions in the public press whenever a case of breach of discipline arises in an educational institution. The harm caused in this way is incalculable."¹

"The outcry in the press," writes Dr. Wali Mohammad,² "and the utterances of the leaders when the students go on strike—and strikes are so frequent and easy—require no comment."

Sir Alfred Croft,³ writing in 1888, said that "the public journals open their columns freely to the complaints of schoolboys against their teachers—a phenomenon which probably finds no parallel in any other country in the world. It is well to resist the tyranny of authority and its encroachment on the liberties of the public, but it is not so well to denounce the exercise of all authority as tyrannical. Schoolmasters are not more insensible than others to public attack ; and the knowledge that their action is likely to be misrepresented, and themselves exposed to obloquy in the newspapers, is not calculated to strengthen their hands."

XIII.—The sense of corporate life.

92. Separation of the teachers from the students is also to some extent responsible for the weakness of the sense of corporate obligation in the student community. Within the orthodox Hindu family, corporate life is strong ; there each member learns co-operation with others, the power to subordinate his own interest to that of others. But the Indian student has not, as a rule, found it easy to show these admirable qualities outside his home, or to acknowledge the claims of other forms of corporate life.

93. In school and college, the Bengali youth should learn the rudiments of public spirit and the value of co-operation with

¹ Report, page 4.

² General Memoranda, page 409.

³ Report on the subject of the Discipline and Moral Training in Schools and Colleges, 1890, page 142.

others. "What is especially needed," writes Mr. Jaygopal Banerjee,¹ "is to develope in the students a sense of that corporate responsibility, which is now rather conspicuous by its absence, and the habit of bringing to bear upon their comrades the forces of collective opinion in matters relating to moral discipline." There are few signs of a strong corporate life in the University or in most of the colleges. The University, the college and the school, divorced as they are very largely from the traditions of the old Indian home as well as from the new aspirations that are growing up around, possess few features which move the affections of the students or grip their minds.

94. To the University as a place of education the student is attached by few associations which appeal to his affectionate regard. At the time of his examination, the University grants or refuses him a certificate or degree. Apart from this, the University as such hardly comes into the student's life. Very many of the students never even see the university buildings from the beginning to the end of their academic career. Mr. Wordsworth¹ reports to us that—

"in the university sense there is little comradeship. What facilities exist are little used. The University Institute, in spite of the excellent building and other advantages, makes little appeal to students, and its members are some 400 only out of the many thousands of students in the city. The Muslim Institute has more attraction, I believe, for Muhammadan students."

95. If the University has been unable to make much appeal to the students, many of the colleges have not been much more successful. "Students," writes Mr. Haridas Goswamy,² "remain throughout mere intellectual acquaintances. They have little more than formal business relations with professors and lecturers." Mr. Wordsworth,¹ speaking from his experience at Presidency College, contends that—

"at present there appears to be little corporate feeling and solidity in colleges, but a fair amount in hostels; though a college like St. Paul's is probably conscious of its corporate unity, being not overlarge, mainly residential, having its playing fields on the spot, and a definite tutorial system. The want of playing fields, the cleavage between different races and faiths, the large classes, and the lack of facilities for assembling a college as a whole are obstacles to the development of this feeling. Even the Presidency College has no hall where the whole college can assemble for addresses or other functions. Recreation facilities are limited in most places, especially in Calcutta; those that exist are seldom used to the full."

¹ Question 17.

² Question 1.

96. For the students in most western universities, it is college athletics that at once strengthen and express the corporate spirit most characteristically, if not most fully. But in Bengal, students are so far from regarding it a privilege to play for the college that they often attach themselves to local clubs in preference. Even the best colleges find it difficult to keep a team together during the whole season. We are told that the Presidency College team played several of its hockey matches last year with only seven or nine men. Mr. Zachariah¹ sums up the situation in strong terms :—

“A man may be a member of Calcutta University and take his degree without ever having read any books besides his text and lecture notes ; without ever having exchanged a single word outside the class-room with a single teacher ; without ever having wasted a single moment on games or exerted himself more violently than by a gentle promenade round College Square tank ; without ever having been infected by any ill-judged enthusiasm for learning ; and, worst of all, without ever having belonged to a single club, society, guild or fraternity of any sort whatever, that is, without having had any real interests in which two people could associate.”

97. A casual association in crowded class rooms for a few hours in the middle of the day does not constitute that corporate intellectual life which the terms college and university suggest. The difficulties, however, are immense. Students of a college have few opportunities of social intercourse with each other, and practically none with those of another college. In the first place, there is no time for such intercourse.² Lectures fill the college day ; at the end of the day it is too much to expect the vast majority of students to walk to the tennis courts or to the playing fields. And, secondly, there is often no suitable place for meeting. In many of the colleges there are no rooms in which the students can congregate and enjoy social intercourse. In one of the Calcutta colleges, where the number of students amounts to about 1,800, the teaching has to be organised in shifts, like a factory.

98. A fact which shows the thinness of college loyalty and partly explains it, is the readiness with which students desert one college for another. Many a boy who has passed the matriculation applies to half a dozen Calcutta colleges for admission. If his addresses are rejected, he falls back on a college in the mufassal. Many of the mufassal colleges, accordingly, begin

¹ Question 1.

² Chapter XIII, para. 114.

their term about a week after those in Calcutta ; and their clientele consists to some extent of disappointed students who can have no great pride in the college, not of their choice, but of their fate. After the intermediate examination, there is another exodus to the metropolis ; and most mufassal colleges have comparatively small degree classes. The student who has failed often wanders forth in search of a new college to which he may attach himself. It is no uncommon thing for a student to be a member of three or four colleges, one after the other, before he takes his M.A. Few of the colleges have evoked any of the permanent loyalty which in England sends generation after generation of the members of a family to the same public school and the same college at Oxford or Cambridge.

99. But there are signs of a coming change. St. Paul's College has set before itself ideals of corporate life which are being fulfilled. The hostels, though things of yesterday, are doing good. "The Eden Hindu Hostel," says Mr. Wordsworth,¹ "has a definite organisation, with wards. Loyalty to the ward is strong and forms the basis of a vigorous social life and of athletic interests. Here is to be found the nearest approach to the *esprit de corps* of English schools and colleges. Despite certain disquieting revelations of the past two years, I consider this hostel (and others where supervision is good) a valuable element in the educational life of the city."

100. This dawn of a corporate sense is beginning to assume a wider significance.

"It is a good sign of the times," writes Dr. Brajendranath Seal,¹ "that the college student in Bengal is feeling more and more the call of social service, the glow of national hopes, and the urge of national ambition in every field—social, economic, political and religious."

XIV.—*Joylessness of student life.*

101. These very years of student life to which, in other parts of the world, men usually look back as some of the happiest in their lives, are too often in the case of the Bengali student a time of unremitting drudgery and anxiety. By force of circumstances he is a man before his time, and one with a definite but deplorably narrow aim, a degree. "The college atmosphere," writes Mr.

Patrick Geddes,¹ "is too much exhaled from solitary drudgeries and these in perpetual anxiety and fear—fear alike of approaching examinations and of future uselessness."

102. The chief cause of the student's load of anxiety is poverty. Mr. Khudi Ram Bose² says that "the overwhelming majority of college students are so poverty-stricken that they have to live on less than a subsistence ration with remote relations or with fellow-villagers or with employers whom they serve in the capacity of family tutors." The Rev. W. E. S. Holland¹ speaks in not less despondent terms. "The poverty of these classes is intense. It is the determining factor of higher education in Bengal; a poverty of which every principal has heart-breaking evidence." Mr. P. C. Mahalanobis¹ gives a more specific statement. "From my own experience as a student of the Presidency College (1908-13) I would say that more than half of our students find it very difficult to make both ends meet, and I should put down a fifth to be actually living below the poverty line." The extent of this poverty, however, is difficult to determine. Many of our correspondents who are best fitted to judge in the matter have told us that the very poor student is apt to keep his troubles and his anxieties to himself, and is reluctant to receive assistance from others. But there is one fact which demonstrates the existence of poverty among students. Many a student in Bengal has perforce to spend his mornings and evenings—perhaps both—during term time in coaching school-boys in order to meet his college expenses.

103. The drudgery of a student's life is described in a pamphlet written in 1910 by the Rev. Garfield Williams.³

"Here is a picture of the actual life of the Calcutta University student. He gets up about six o'clock in the morning and immediately he has dressed (which is not a very long process) he starts work. From seven to ten, if you go into his mess, you will see him 'grinding' away at his notes or his textbook under the most amazing conditions for work. He is usually stretched out upon his bed or sitting on the side of it. The room in which he works is almost always shared with some other occupant, usually with two or three, or even more occupants, mostly engaged in the same task as himself if they are students. Often there are two or three of them reading aloud, or repeating audibly to themselves. At ten o'clock the boy gets some food, and then goes off to his college for about five hours of lectures. A little after three in the

¹ Question 1.

² Question 17.

³ The Indian Student and the Present Discontent, page 27 (Hatherill and Son, 1910).

almost in he comes home to his mess, and between three and five is usually to be found lounging about his room dead tired, but often engaged in animated discussion with his room-mates or devouring the newspaper, which is his only form of recreation and his only bit of excitement. At five o'clock he will go out for a short stroll down College Street or round College Square. This is his one piece of exercise, if such you call it. At dusk he returns to his ill-lighted stuffy room, and continues to work, with the exception of a short interval for his evening meal, until he goes to bed, the hour of going to bed depending upon the proximity of the examination. During the last three weeks before an examination it is usually in the small hours of the morning."

101. Surrounded as he is by manifold anxieties and housed under dreary conditions, the student tends to become moody, depressed and absorbed in himself and his prospects. He needs therefore, more than other students of the same age, recreation and diversion. He has few interests to take him out of himself and give him points of contact with other men. He rarely has any hobbies; possibly because hobbies are expensive both in time and money. Too often he has no older and experienced man to turn to for guidance through these years of anxiety and depression.

105. It is not surprising therefore if in moments of despondency he falls a victim to uncontrollable excitement, sometimes of the most serious and violent nature. It is at such periods of life that young men of all races need physical exercise and recreation, but these are not readily available to the Bengali student.

XV.—*The weakening of older restraints.*

106. One of the questions which we addressed to our correspondents asked whether in their judgment the conditions under which students live in Calcutta and elsewhere in Bengal are such as to undermine traditional morality and to weaken family ties. On no point have we received more thoughtful answers. The substance of these we shall now summarise, keeping in mind (like most of our correspondents) the exceptional difficulty of dealing with a subject so many-sided and elusive.

107. Sir P. S. Sivaswamy Aiyer¹ "doubts whether the complaints about the undermining of the morality of the students are not very much exaggerated." Mr. P. C. Mahalanobis² warns us that "in this land of strong social prejudices and conservative

¹ Question 17.

tendencies it is easy to become unduly alarmed at the Bohemian character which affects more or less the average student life everywhere." In present circumstances, the widest diversity of opinion and practice is both natural and inevitable; and general statements can only be made with the utmost caution.

108. The divergence of opinion disclosed in the evidence which we have received is due, we believe, to the varying points of view from which our correspondents have regarded the situation. Some of them are apprehensive of the unknown dangers of the future, and regard with an alarm, which is not altogether unjustified, the inflow of new ideas from the West as being dissolvent of the traditional customs and morality of the country. These correspondents cling tenaciously to the past and view with disfavour the acceptance of a new outlook by the students. Others again, more conscious of the benefits which western civilisation has already conferred on India in bringing her into contact with the rest of the world and in arousing the public conscience against undoubted social evils, are eagerly responsive to the new ideals and sympathetically sensitive to the new atmosphere which is being created by western thought.

109. Whether gladly or reluctantly, our correspondents for the most part are agreed that the old order has been seriously shaken¹; and that the mental and moral outlook of the educated classes of Bengal is undergoing a transformation. But this transformation has not been by any means as sudden as some would lead us to believe. Its beginnings may be traced well back into the last century. In answer to an inquiry by the Government of India in 1887,² the Government of Bengal recorded the opinion that "the virtues of obedience to lawful authority, of discipline, and of respect for others have declined among the educated classes of India. This evil has grown to an extent which in ~~and~~ to disturb visibly the happiness of domestic life, and any measure calculated to reduce its dimensions, or even to check its growth, would be of the greatest advantage and most welcome to the community." In forming this opinion the Government of Bengal were fortified by the experience of men well qualified to

¹ See Questions 17 and 18 *passim*.

² Report on the Subject of the Discipline and Morality of the
1890.

subject. The British Indian Association,¹ for example, "noticed with much concern that there is in our boys and young men a growing decadence of respect for age and authority. Such tendencies are calculated to produce disastrous consequences, and it is highly desirable that measures should be taken to curb them." Maulvi Abdul Quasim Mohammad Nurul Alum Sahib¹ of the Calcutta Madrassah felt that "the general extension of secular education in India had resulted in tendencies unfavourable to the discipline but favourable to irreverence in the rising generation, and thought that these evils created the greatest anxiety among the elders of the community."

110. Sir Alfred Croft,¹ Director of Public Instruction, gave his views in a long and valuable memorandum from which we quote the following extract:—

"The alleged relaxation of the restraints of family life and social order is ascribed to the fact that each generation is advancing intellectually beyond its predecessor, so that the younger men view with continually increasing impatience the habits, ideas, and traditions of their elders. It is easy to see how a spirit of this kind, so far as it has taken hold of the young, spreads from the home circle outwards, and excites a general feeling of resentment against restraint and of dislike for authority. Parents complain on all hands that boys are getting beyond their control. They yield to, or are powerless over, their sons, and they wish to transfer their responsibility to the school masters. Nevertheless, the remedy lies with them and in no other hands. In no community can the home training of the young be neglected without serious danger. Parental control is hardly less necessary to the order and stability of society than the authority of the magistrate, but it cannot be maintained or restored by any external measures. So far as the evil exists, Hindu society must work out its own cure. Disrespect and insubordination in the family circle; the boy patriot deplored the woes and discussing the regeneration of his country, instead of attending to his lessons—these are spectacles which all right-minded parents deplore, and which the exercise of their authority can alone remove."

111. Mr. C. Macnaghtan,¹ Principal of the Rajkumar College, Rajkot, who was one of the most thoughtful observers of those days, said that—

"There is no doubt of the evil, a shallow and conceited inconvenience in educated Indian youths; and it seems, I think, to be generally agreed that the evil has been intensified by, if it does not owe its origin to, the system of Government education in India. I should say that some of my Indian friends, for whose judgment I have the greatest respect, consider this unsatisfactory state of things to be the inevitable and natural effect of the transitional stage

¹ Report on the Subject of the Discipline and Moral Training in Schools and Colleges, 1890.

through which this country is passing, and they think that the evil must grow worse before it can be better."

112. The Bengal Government in a letter (February 26th, 1889) dealing with the same subject said :—

"The alteration observed in the Hindu character is the result of a power working at greater depths than the discipline of the class room—the power of scientific truth and logical methods brought home to a society which had previously been dominated by traditions of a very different order. These traditions necessarily fall before the superior forces arranged on the other side, and with these comes down the superstructure, much of which it is desirable to preserve."

113. During the last thirty years, the movement has gathered momentum. The family unit is fast giving place to the individual, so far as the student is concerned. "Brothers live independently of each other," writes Sir Ramkrishna Bhandarkar,¹ "and in some cases, sons of their parents." Mr. Haridas Bhattacharyya¹ says that "students living far away from home soon become accustomed to hostel and mess life. and many do not go home unless the hostel is absolutely closed." "New ideas are poured into their heads," says Mr. Pashupatinath Shastri,¹ "the wrong side of the new western civilisation presents itself to them, and gradually they begin to dislike their jungly villages and old associations."

114. We have been impressed by another aspect of this independence. The student, as a rule, and not the parent, makes the necessary arrangements for his admission to college. Many a student wanders about at the beginning of term from college to college and pleads for admission to the head clerk² or one of his subordinates; and when the doors of all the Calcutta colleges are closed against him, he continues his wanderings round the several mufassal centres until he gains admission to a college.

115. But on this point also we should beware of exaggeration. Students, as a rule, spend four months of the year with their families at home, and the majority find no great difficulty in adapting themselves to the old conditions. Student life in Calcutta and the other collegiate centres need not be very remote from home-traditions, as students from the same village and district often club

¹ Question 17.

² "The limited accommodation in colleges and the large number of applicants for admission—this deadlock is solved by bribing the clerical staff," says Mr. Bimal Chandra Ghosh; Question 17.

together—a point which is emphasised by Dr. Brajendranath Seal¹:

"Fortunately, the student coming from his village to the central district or to the capital city, does not ordinarily lose his moorish associates with others from his own district, or others from his own community, and as the Indian standard of morality is a communal one, the fellow-villager or the fellow-caste man is to him, in his unsophisticated state, a reminder and voucher of the communal conscience."

116. The students as a class are impregnated with the new ideas. The problem of university education in India is not merely one of rapidly increasing numbers and the consequent difficulties in organisation; it is complicated by the fact that these increasing numbers are affected by new customs and habits which are in variance with the old-time traditions of Indian society. It is likely that this movement will not only spread in volume but increase in intensity.

117. Many of our correspondents deplore these changes. Mr. Manmathanath Banerji,¹ for example, feels that "the young inexperienced students coming fresh from their homes in the mufassal are thrown headlong into the whirlpool of Calcutta life with its many temptations and dangers. The hostels and messes are poor substitutes for the homes which they leave behind. Removed from all parental authority, they find themselves in an atmosphere where they are at liberty to do what they please." The Rev. T. E. T. Shore¹ thinks that the conditions under which many students live in Calcutta and Dacca are prejudicial to their character and morals.

"This," he writes, "is the natural result of withdrawing a boy from the restraints, such as they are, of home life and of a social unit sufficiently limited for the doings of every individual to be matters of general knowledge and comment, and of plunging him into the unhealthy atmosphere of a large town where his daily doings are a matter of little or no concern to anyone."

118. Mr. Amvika Charan Mazumdar¹ deplores the decay of the traditional virtues:—"Want of proper guidance, coupled with absolute freedom of action in immature years, presents a serious obstacle to the cultivation of most of those virtues which are the main characteristics of Aryan culture and civilisation. Family ties are easily broken off, and a spirit of selfishness and egotism is too early implanted in the student's nature to be easily

radicated in after life." Mr. Mohini Mohan Bhattacharjee¹ laments the decay of religious faith: "We miss in the students of Bengal all that is to be traced to the influence of religion—the fervour of faith, the glow of devotion, the cheerfulness of spirit of hope. If family ties have not been altogether undermined, they have at least been slackened and terribly shaken." And Sir John Woodroffe² argues that "the whole course of education is to ignore traditional morality and thus leave it the easier prey of sectarian attack and secular scepticism."

119. Others of our correspondents, however, suffer few pangs of regret at the weakening of the old traditions and welcome the present changes in society as bringing in their train a new sense of individuality and freedom.

"Western education," writes Mr. Hemabachandra Maitra,¹ "has produced, and must produce, a change in the ideas and sentiments of those who come under its influence. In many respects it is decidedly a change for the better. If the democratic spirit which now prevails all over the world—not in practical life alone, but also in literature—has sometimes manifested itself among our students in an undesirable form, it ought to be noted that this is not confined to university students. It has affected those also who are outside the pale of the University; and if the morality of young men living in large towns as students were compared with that of young men living an idle life in villages, I believe it would be found that the former as a class are morally superior to the latter."

120. Two correspondents, Mr. Harakanta Bose¹ and Dr. Nares Chandra Sen Gupta¹, write in almost identical terms. "The liberalising influence of western education," says the former, "may lead our youths to break away from the trammels of traditions; but this should be regarded rather as a sign of health than of disease." "Some change is inevitable," writes the latter, "as any system of sound education must needs develop a certain amount of individuality and freedom of thought in students, while traditional morality largely rests upon the stifling of such individuality." Dr. Tej Bahadur Sapru¹ goes further in regretting that the students are still subjected too much to the cramping influences of family life, and writes as follows:—

"I do not think it is correct to say that family ties have been undermined. On the contrary, what has sometimes impressed me is that students subordinate too much their individual tastes and inclinations to the will of the family. The hold of the family in India over the individual is far stronger than

¹ Question 17.

² General Memoranda, page 310.

outsiders realise. To a certain extent it is desirable that it should be. Carried to an excess it retards the growth of the individual."

121. A third view is expressed by some of the most thoughtful and respected of our correspondents. These regard the changes as inevitable and as being largely for the better, yet they regret either the suddenness and violence of the transition or the destruction of valuable factors in the old scheme of things. Dr. Brajendranath Seal,¹ while admitting that "the Indian thrives best in home surroundings and does not bear transplanting very well," adds that "the parental home is no longer available to the large majority of students; and it is well that it should be so; the growing youth should be weaned from his home, provided the process does not arrest or ruin his growth."

122. In harmony with this view are those expressed by two other correspondents somewhat similar in their bravery of spirit, in their regret for the passing away of old times, and in their realisation that the present evils are not necessarily permanent but the inevitable products of an era of transition.

"To a certain extent," writes Mahamahopadhyaya Pramathouath Tarkabhusana, Professor in the Sanskrit College,¹ "these circumstances are unavoidable, for the times that we are passing through are transitional times and the minds of the guardians as well as the wards of the University are unsettled. The moral ideas of the Indian races are not in a static, stereotyped condition but they are in a process of evolution consequent upon the impact of the West and the East. This in itself is not unhealthy, although for the time being crudities are seen to result. Implicit faith in the existence and immortality of the soul, unquestioning acceptance of the letter of the Shastras, and a conception of the present life as one in a series and a preparation for the next—these were the most marked features of our traditional morality. For the present, however, it is jostling with ideas imported from the West, such as the supreme value of the service of humanity (which for the individual is limited to this life), the exaggerated importance attached to the individual and the universality of a material criterion. In intellectual matters the age is distinguished by its tendency to the revaluation of accepted values or, in other words, to criticism. Not even the most orthodox would reasonably condemn such ideas *in toto*; the need of them, for the intellectual liberation of the Indian brain, is realised by all. But the unsettling effect of this transitional morality—of this mechanical juxtaposition, not reconciliation, of the two—should be checked as far as possible in the period of growth and training. The student ought to conform in these matters

to social usages and beliefs, and must not move faster than society at large."

123. In the reply with which he has favoured us, Mr. Ramendra Sunder Trivedi,¹ Principal, Ripon College, Calcutta, describes the University of Calcutta as "altogether a foreign plant imported into this country, belonging to a type that flourished in foreign soil"; and feels that "the new system was introduced in almost complete defiance of the existing social order regulating the everyday life of an ancient people; that it was a temporary device necessitated by a sudden demand and a sudden emergency." He pleads earnestly that "each race and each people may be allowed to have its own way in the pursuit, the acquirement and the advancement of knowledge, in accordance with its special instincts, special aptitudes and special characteristics." Though he does not think it "either practicable or desirable to build anew on entirely new foundations," he makes an earnest appeal that "two sets of ideals with corresponding methods of their realisation—a set of ideals and methods indigenous to the soil, and a second set imported from abroad—should be placed side by side, and a comparative study be made of them in their relation to existing conditions and the exigencies of the present situation." We shall try to answer this appeal in the second part of our report.

XVI.—The character of the student.

124. Such and so contrasted are the opinions held by our correspondents in regard to the change that is spreading over student life. We must next attempt some description of its effect on the character of the student. A considerable number of witnesses regard the Bengali student as a very good specimen of his class. Sir J. C. Bose² thinks that "Bengali students have suffered from misrepresentation, perhaps unintentional. I am in a position to state that they in no way suffer by comparison with their brethren of the West. I find that they are highly susceptible to good influences and are promptly responsive to any appeal to

¹ General Memoranda, page 303.

² Question 17.

their idealism." Sir Asutosh Chaudhuri¹ is even more appreciative :—

" Our students as a class are intelligent, moral and affectionate. They are dutiful and have great love for their people, and patriotism has become a religion with them. I cannot think of a better class or one deserving better encouragement. They are responsive to kind treatment. Closer attention to their requirements would undoubtedly create in them a strong corporate life and make them more virile. They are splendid as a class."

125. The Bengali student, as a rule, is industrious, courteous and law-abiding. He cheerfully makes great sacrifices for his family, just as the family does for him. He is very ready to help others, particularly of his own social group, in time of need; he is an admirable nurse in cases of illness; and in many cases the more well-to-do students of a college subscribe towards the expenses of the poorer students. In class the Bengali student is generally well-behaved; and in the Indian school and college, some of the minor worries which confront the teacher in other countries are noticeably absent. These observations are confirmed by the experience of two important colleges in Bengal. Dr. Watt and his colleagues at the Scottish Churches College state that they "have little difficulty in the matter of discipline." The staff of Serampore College¹ "have experienced little or no difficulty in maintaining the necessary discipline among the students".

126. But while the student is, as a rule, obedient to laws and regulations, his obedience appears to be passive rather than active. He does not wish to create trouble but, on the other hand, he rarely realises his essential oneness with the college; his loyalty to it, his co-operation in its life and discipline, is not active enough; his attachment to the college is not sufficiently deep to stand a sudden violent strain. A more venial offence which springs from his temperament is that in many small points of discipline he is apt to be casual; and that the school boy and student alike lay no great store by punctuality; and have few qualms about breaking engagements without notice.

127. Much more serious is the lack of respect to elders and teachers which is attributed to some students by various correspondents. Sir Ramkrishna Bhandarkar¹ says that "a great many students...show a notable want of respect for elderly

¹ Question 17.

and eminent men in society." Mr. S. S. Banerjee¹ contends that the mingling of students in colleges and hostels has created a sense of equality which is reflected in the attitude of students towards their elders and teachers. India, however, is not alone among countries in the world in this experience. The first wave of the critical and democratic spirit usually results in a certain self-assertive rudeness which time and a riper judgment mellow down to its proper proportions.

128. Grave disorders, both moral and political, are not unknown, but these evils are not by any means general. With regard to the first a certain proportion of students are not free from sexual indulgence and vice, nor from the unhappy physical diseases that attend such excesses. "Unsupervised, remote from any public opinion for which they care, living amid the vile temptations of this great city, moral shipwreck is grievously common," writes the Rev. W. E. S. Holland² with reference to students living in Calcutta.

129. The existence in the student class of the unbalanced and fanatical spirit that leads to political crime and anarchy is better known. The committee which inquired into the recent troubles in the Presidency College asserts that "no evidence is needed in proof of the undoubted fact that revolutionary propagandists have with considerable success carried on their work among students and have from time to time brought into their camp disaffected youths of even considerable ability."³ It is in the schools that the trouble usually begins. There were 557 boycott and picketing cases between 1906-09 in Eastern Bengal and Assam; "in the great majority of these, probably 75 per cent., school boys and teachers were concerned." The evidence collected by the Bengal District Administration Committee⁴ indicates that the university men among the seditionists were nearly all university failures. The Sedition Committee in their recently issued report state that "the revolutionary associations have spared no pains to secure recruits from schools and colleges."⁵

¹ Question 17.

² Question 1.

³ Report, page 40.

⁴ Report, page 146.

⁵ Report, page 50.

136. Away from his home, the student finds it all the more difficult to resist the critical and destructive tendencies of modern thought with which he comes into contact at college. The superficiality of his training very often leaves him stranded at this rather negative stage without enabling him to fight his own way beyond it. The narrow and external system of education rarely gives him that intellectual and moral courage which faces all the facts, and at length issues in a positive and considered faith. In such a situation as the present it would be vain to expect blind acceptance of an old tradition. The better, indeed the only, way is to give the student such a training and outlook as will enable him to fight his doubts and to gather strength with which to face the spectres of the mind, to slay them and thus at length to rest in a faith which by his effort he has made his own. This faith may still be the old faith, but it will be the old faith definitely appropriated by his heart and mind, and will thus be more truly than before his own.

137. The general lack of religious teaching is noted with regret by many of our correspondents, Hindu and Musalman. Mr. Brajalal Chakravarti,¹ the founder of the Daulatpur Hindu Academy, says that "all our university work is bound to fail unless we can set up the ideal of religion which, however, has all this time been left severely alone." Maulvi Abdul Aziz² urges that "formation of character requires a deep and implicit faith in religious principles." Sir Gooroo Dass Banerjee² refers to the "gradual weakening of religious faith and spiritual culture, resulting from the attaching of undue importance to material science, and to secular intellectual culture, and from the utter neglect of religious and moral education."

138. There are some signs of an increasing desire that (without infringing upon liberty of conscience) schools and colleges should do more in the way of giving to their students opportunities for religious training and observance. And the encouragement of religious observance in some hostels, where the conditions make such an arrangement possible, has been found advantageous not only to individual students but to the corporate life of the society.

¹ Question 1.

² Question 17.

139. Those aspirations of human nature which are most deeply satisfied by a steadfast and active religious faith have, in the case of many students, sought fulfilment in devotion to the cause of the nation. In so far as this devotion represents loyalty to a disinterested ideal and evinces an eagerness for personal service and sacrifice, no one would withhold respect or even admiration from those actuated by such motives, which indeed in their nobler manifestations are wholly consonant with deep religious conviction. But, as we have seen, there are instances in which the appeal to religion has been used for unworthy ends.

140. Unfortunately, the healthy vigour of judgment and the sanity of mind, which would guard the student against such temptations, are not imparted by an education so mechanical and shallow as that now received by many students in Bengal. An education which strikes deeper into character and gives fuller insight into the complex realities of life and duty is needed to protect boys and young men against morbid self-delusion and to instil that steadiness of moral and intellectual discernment which they need in order to distinguish between false patriotism and true. In any event, many of them will not win their way to serenity of mind without agony of thought and long self-discipline. But a sound education can do much to help them, especially those who, by reason of their station in life, must be exposed to the subtler influences of the philosophies and political ambitions of the age. Education, for many reasons, they desire eagerly and rightly claim. But it is only a good education (and they deserve no less) which, along with the more searching discipline of experience, can guard the religious instinct from the corrosion of moral scepticism and guide the spirit of service to noble and fruitful ends.

141. The depressing and often squalid surroundings of student life in Bengal are unworthy of university education. The general discontent with existing conditions is a sign of a larger and more generous idea of what education should be and ought to give. To improve the environment of the student's life is an essential part of any scheme of university reform. Leave the environment as it is, and almost any other reform, however salutary, would for many of the students be wasted. Change the environment, and reforms in the courses and methods of study will be doubly efficacious.

CHAPTER XX.

THE SITE OF THE UNIVERSITY.

1. It has several times been suggested that it would be desirable to remove the University and its colleges outside Calcutta, either to the suburbs or to a locality even far more remote. The chief objects of the proposal are the expansion of the activities of the University by provision of more spacious accommodation than is possible in the centre of Calcutta, the improvement of the conditions, physical, moral and intellectual, under which the students work, and the promotion of corporate life by the concentration of the university work in a university domain.

2. The distribution of the university institutions in Calcutta and of the other great educational institutions of the city is shown on the map in this volume. It will be seen that most of the university institutions have been established within a radius of one mile of College Square—the result partly of design, partly of accident. The institutions in what may be called the central group are the University and the Senate House, the University Library, the Law College and University Press, Presidency College, the Calcutta Medical College, the Sanskrit College, the Hare Training College and School all close together in College Street, one section of the main thoroughfare which runs north and south through the city.

3. The situation is central and convenient of access for the city as a whole ; it lies directly between the two chief railway stations—Sealdah less than a mile to the east and Howrah $1\frac{1}{2}$ miles to the west—and close to the main road which runs to the single bridge (at Howrah) across the Hooghly ; it is easy of access to the western suburbs, as well as to the northern. It lies about a mile N. N. E. in a straight line from the N.E. corner of the Maidan, which is accessible by tram ; it is more difficult of access from the residential suburbs to the east of the Maidan, and to the south at Alipore. Within a mile radius of the Senate House are the Bethune College, Scottish Churches College, Vidyasagar College, City College, University College of Science, Sir J. C. Bose's Research Institute, St. Paul's Cathedral Mission College (C.M.S.), Ripon College, Bangabasi College, the

Indian Association for the Cultivation of Science, and the Campbell Hospital and Medical School. Slightly beyond the mile radius are the Central College; the Madrassah, the Imperial Library and the Indian Museum. Further away in South Calcutta, are St. Xavier's College ($1\frac{3}{4}$ miles), Loreto House ($1\frac{3}{4}$ miles), the Diocesan Training College ($2\frac{3}{4}$ miles), the South Suburban College ($3\frac{1}{2}$ miles), the Palit House Laboratories ($3\frac{1}{2}$ miles), and Sibpur Civil Engineering College (4 miles). The distances stated are measured in a straight line ; the actual travelling distance is greater and it is increased by the approximately rectangular plan of the Calcutta streets. The actual distance by road to Sibpur, for instance, is $5\frac{1}{2}$ miles.

4. It will be seen that relatively few of the existing institutions are at such a distance from the central group as to make inter-collegiate relations and co-operation difficult or impossible; but that further concentration would have great advantages. Such concentration might conceivably be effected in three ways : (1) by removing some of the more distant university institutions to a position nearer College Square,¹ (2) by removing the University as a whole to a suburban site near Calcutta, (3) by removing it as a whole to some more distant locality. Two of the questions—numbers 3 and 21—circulated by the Commission dealt with this problem. The numerous answers show that this matter has been carefully considered by many of our correspondents ; all three plans have been advocated, but the answers show irrevocable differences of view and even of purpose.

5. Question 3 refers to the resources available in Calcutta for the formation of a great centre of learning, which the removal of the University might render of less service to the student. The answers bear testimony to the many admirable literary and scientific institutions of Calcutta. The chief of them are enumerated in the following reply by Sir Gooroo Dass Banerjee² :—

" The resources that exist in and near Calcutta for the formation of a great centre of learning are the Asiatic Society of Bengal, the Bangiya Sahitya Parishad, the Sahitya Sabha, the Indian Association for the Cultivation of Science, the Sir Tarak Nath Palit Science College, Sir Jagadis Chandra Bose's Research Institute, the Presidency College, the Scottish Churches

¹ This would be impossible in the case of Sibpur Engineering College, which we discuss in Chapter XLVI.

² Question 3.

College, the Vidynasagar College, the City College, the Ripon College, the Calcutta University Institute, the Young Men's Christian Association, the Imperial Library, the Imperial Museum, the Zoological Gardens, the Botanical Gardens, and in relation to professional learning, the High Court, the Bar Association, the Vakils' Association, the Calcutta Medical College with its hospitals, and the Belgachia Medical College. Some of these institutions are connected with the University, and some more may be expected to be connected with or to co-operate with it. Though Calcutta has ceased to be the political capital, it still continues to be the intellectual capital of India."

6. In addition to the institutions named by Sir Gooroo Dass Banerjee, other answers mention the Observatory at Alipore, the Cathedral Library, and numerous municipal, commercial, and industrial institutions which should be of great assistance if the University undertakes technological teaching. Sir Nilratan Sircar points out that there are six civil hospitals with several thousand patients. The Victoria Memorial Museum of Indian History, now in process of erection, will form a valuable addition to the educational museums.

7. Many of the Calcutta institutions are remarkably well equipped. Dr. N. Annandale¹ tells us that the library of the Zoological Survey is better than that of several British university towns. He says :—

" I have myself made use of the scientific libraries of three English, two Scotch and two Japanese university towns. I do not hesitate to say that Calcutta, with the libraries of the Zoological Survey, the Geological Survey, and the Asiatic Society of Bengal, is very much better off for zoological literature than any of these, and my colleagues bear me out so far as their experience goes."

The library of the Geological Survey is regarded as one of the best working geological libraries in the world and certainly the finest in Asia. The herbarium in the Botanical Gardens at Sibpur, is world-famous.

8. Calcutta in addition to possessing great educational resources is the home of many illustrious scholars. In order that this advantage should be utilised to the full the University should be within the city, in touch with the intellectual movements of which it is the home. After reference to its various institutions, Dr. Abdurrahman¹ says of Calcutta :—

" It has till very recently been the capital of India and is rich in all that the West has given to the East. Here England and India stand face to face,

and the movements have melted and fused ... The ultimate reconciliation of Indian and European ideals in education, which should fit the new generation to make use of modern civilisation and to enter upon its own inheritance, demands that the University should be centralised in Calcutta."

9. Question 21 asked for suggestions or criticisms with regard to the proposal that the University should be removed to an easily accessible suburban site. The number of answers received was 175. The opinions expressed in them are almost equally divided; 80 are against the suggested suburban site and 73 in its favour.

10. A proposal to remove the University far away from Calcutta was made in 1910 by the Rev. Garfield Williams in his pamphlet 'The Indian Student and the Present Discontent.' After a graphic description of the conditions of student life in Calcutta, which have been discussed in the last chapter, he declared that—

"there is only one possible treatment of the condition I have outlined, and that is the complete removal of the University to a place where it would have a chance to be a university in deed and in truth. Whether that be Ranchi¹ as has been suggested, or some other place, is not a matter of importance at the moment. But if I have made out my case that the life and conditions of the students are predisposing causes in this present discontent, then I think there is no difficulty in proving that the only possible treatment of the condition is the complete removal of the University to surroundings which will make its life and growth upon right lines possible."

The ideal of Calcutta University, he repeats, cannot be fulfilled in the heart of Calcutta, and he regards the immediate removal of the University as essential "not only from the point of view of education but also of the morality of the State." In his answer to Question 21 Mr. Garfield Williams says that he has not altered the opinion expressed in his pamphlet and re-asserts "that the only solution of the problems of the Calcutta University lies in the removal of the arts and science sections of the University from its present site."

11. The view of the desirability on moral grounds of the change is urged by many of our correspondents. Thus Mr. Umacharan Banerji² deplores the distractions of the students at the present site. "The evils and temptations of social and political life," he says, "are so numerous that many a student is hopelessly spoiled thereby. The students should be brought up in a calm and quiet atmosphere, amidst healthy surroundings, free from all evil influ-

¹ Ranchi, which is now in Bihar and Orissa, was then included in Bengal.

² The references in this chapter, unless otherwise stated, are to the answers to Question 21.

ences and distractions." Maulvi Abdul Aziz wishes the University transferred so that the students may be free from a 'noxious and vicious atmosphere.'

12. The removal of the University from its present position to the suburbs is represented by some correspondents as urgent and essential. Thus an emphatic answer by the staff of Serampore College says that they are in "hearty sympathy with this proposal" and regard it as "an indispensable preliminary to the satisfactory solution of the grave and complex problem of university education in Calcutta. An indefinite continuance of the present system spells disaster." Mr. B. Mukherjee of the staff of the Diocesan College considers that the adoption of the suburban site would be "an immense advantage to the cause of education," if financially practicable. Dr. Syamadas Mukhopadhyaya declares that it would be an inestimable boon to Bengal; but as he would leave a few 'arts' colleges and some post-graduate colleges in the city, he contemplates only a partial removal.

13. The advantages expected from the removal of the University are enumerated as follows by Mr. Atul Chandra Sen:—

"(a) The calm and quiet of the suburbs will be specially favourable to the pursuit of knowledge and in keeping with the traditions of the Indian methods of education.

(b) The places being free from the distractions and allurements of the town will be specially suitable for the growth of a healthy moral life.

(c) Provision can be easily made for physical exercise and all sorts of innocent games and amusements.

(d) The suburbs being open on all sides would be conducive to the preservation of good health.

(e) The location of a number of colleges close to each other would facilitate interchange of ideas and the growth of a corporate life.

(f) The students will have the opportunity of associating with their teachers who will have their residences close to the institutions to which they are attached.

(g) The cost of living in the suburbs will be less than that of towns and hence would prove a blessing to our boys, most of whom come from the middle classes.

(h) Above all, our boys coming mostly from the villages will be trained to live comparatively simple lives and will not be ruined by habits of luxury and the spirit of frivolity which are so prominent characteristics of town boys."

14. Support to the scheme is given by many correspondents whose opinion carries great weight—including Mr. Justice Abdur Rahim, the Maharajadhiraja Bahadur of Burdwan, Nawab Syed Nawabaly Chaudhury, and such educational authorities as

the Rev. W. E. S. Holland, Principal of St. Paul's Cathedral Mission College, the staff of the Bethune College, and Mr. K. Zachariah of Presidency College. The proposal is moreover supported by an advocate of a corresponding change for Bombay University, Sir R. G. Bhandarkar. The views of these witnesses are so important that they deserve quotation.

15. Mr. Justice Abdur Rahim,¹ while advocating that the University should be converted into a residential and teaching university, says:—

“In any event, I would suggest that the Calcutta University should be located in a suitable site in the suburbs of Calcutta. The Presidency College may be removed there, and any other colleges that may be established in the future, including the Muhammadian College, which, I understand, has already been sanctioned, must also be located within the university limits. These colleges should be entirely residential.”

16. The Maharajadhiraja Bahadur of Burdwan,² in discussing the need for the improvement of the residential conditions of the students, recommends that the colleges should be removed “from the contaminated atmosphere of a city and placed at a safe distance from it.” Each college, he suggests, should comprise a boarding house for the students, professors' quarters, a hospital and playground; and all the colleges should be grouped into a university colony away from the city so as to secure for the students a purer and better intellectual atmosphere.

17. Nawab Syed Nawabaly Chaudhury, distressed by the conditions of student life in Calcutta, would remove the University and would place it in the suburbs, preferably at Barrackpore. He bases his conclusion mainly on the impossibility of the University making sufficient suitable provision in Calcutta for the increasing number of students, or securing adequate expansion of the college buildings.

18. The Rev. W. E. S. Holland³ warmly supports the removal of the Teaching University of Calcutta to a suburban site, and he would leave Calcutta as the head-quarters of a new University of Bengal for colleges outside Calcutta and Dacca.

“The whole system here sketched,” he admits, “could be worked if the colleges retained their present location. But it would be an enormous gain to university life and efficiency if the colleges could be induced to sell

¹ Question 3.

² Question 17.

³ Question 6.

up their present property, and combine to form a university of residential colleges on a single large site with its central university buildings where all honours lectures would be held, and with its own playing fields, in the suburbs. Tram facilities should be provided to place the University within the reach of students whose homes are situated in Calcutta.

The present university buildings could become the home of the new University of Bengal. Some of the present college buildings might be utilised as 'academies.' Some would provide greatly improved accommodation for the more important high schools. Others would fetch a large price in the open market."

19. The authorities of the Bethune College for Women are also emphatic in their preference for a suburban position. The Principal, Miss A. L. Janau, holds that the removal "is necessary in the best interests of the University itself and of the students;" and she would restrict the size of the University by transferring the mufassal colleges to the proposed University of Bengal. Her colleague, Mr. D. N. Roy, declares himself in favour of "immediately establishing a teaching and residential university in a healthy locality in the suburbs of Calcutta. Calcutta should continue to be the seat of a federal university."

20. Mr. Zachariah of Presidency College pleads for a better academic atmosphere. He says¹ that—

"in Calcutta the University is lost in the city. There are any number of rules and regulations, time-tables and curricula, professors and students—but there is no distinctive 'ethos.' There may be certain advantages in this association with a big city, chiefly for scientific and technical studies, and even in literary and philosophical studies, the intimate connexion with real life in its many aspects is a valuable test of theory and a distinct gain in many ways. It is true that an academic atmosphere may produce a crop of 'beautiful theories unclouded by a single fact'; but, on the other hand, such an atmosphere is of immense advantage in embodying and preserving a university spirit, in maintaining traditions and in influencing the members of the University profoundly even when no book is read and no word spoken."

The difficulties of establishing such a university within Calcutta are recognised by Mr. Zachariah.²

"It would be very much better," he says, "if they [the colleges] could take wing and fly to the suburbs of Calcutta..... If, however, all the colleges refuse to migrate, the reluctant ones might be allowed to establish some form of inter-collegiate co-operation for themselves; the rest would settle down somewhere near Calcutta and form another university."

21. Sir R. G. Bhandarkar, referring to the corresponding problem in Bombay, urges that it would be best for the University

¹ Question 1.

² Question 5.

and its colleges to be transferred to a quiet suburban locality ; but he, recognises the financial difficulties of the proposal, and states that it was rejected when proposed for Bombay University, a decision which he regrets.

22. An additional argument in favour of removal which has been pressed upon the Commission is based on the expense of house accommodation in Calcutta. Calcutta is at present confined to a comparatively narrow strip of slightly raised ground between the Hooghly on the west and the depression of the salt lakes to the east. The area of Calcutta is therefore cramped ; and the buildings are all the more crowded in some places owing to the extent of the Maidan, the numerous squares, and the gardens and compounds of many private residences. Moreover, owing to the tenacity with which many Bengalis cling to their homes, there are in the centre of the city numerous small houses which do not make adequate use of their ground. Residences suitable for Europeans and for Indians of the professional classes are insufficient in number, and the rents for such houses are extremely expensive. The standard of living in Calcutta is very high, being set by wealthy Indians and European merchants whose incomes are far above those practicable in the educational services. A professor from Britain finds it difficult to live in Calcutta on his pay, and it would be an unquestionable advantage if less expensive residences for the university staff could be erected on the cheaper land available outside Calcutta. The provision of suburban homes for university teachers is a much simpler policy than the removal of the University ; for it is easier to take the professors to their students than *vice versa*. But though the provision of suitable quarters for the university staff is a consideration which must be borne in mind, it is relatively a minor factor.

23. Many of our correspondents, regarding the removal of the whole University as impossible, recommend its partial removal. Mr. Atul Chandra Sen would leave one or two colleges in the heart of the town for students living with their parents or guardians. Mr. Manmathanath Ray regards the removal as 'desirable' and urges that it "should be effected at once, if funds permit," but he would leave it "optional with the existing colleges to remove to the site." Mr. Herambachandra Maitra, Principal of the City College, suggests that as new colleges are needed they "may be established in the suburbs," but that the University

should not be removed. According to Rai Yatintra Nath Choudhury the engineering and technological colleges should be outside Calcutta and the "other colleges should remain where they now are." Mr. E. E. Biss takes the opposite view, and would transfer the arts and pure science colleges and leave the professional studies within the city. The same principle underlies the proposal by Mr. Promode Chandra Dutta that the classes of the first four years at Presidency College should be removed so as to leave more room there for post-graduate classes. Mr. Bimal Chandra Ghosh would also distinguish the colleges to be removed according to their grade ; post-graduate and research work he would remove to the suburbs, but "colleges for undergraduate studies should not be removed from where they are ; on the contrary, more colleges should be opened in areas of the city—fast growing in importance—e.g., Howrah, Cossipore and Entally. Such colleges should be kept up and increased in district towns, as youths between 16 and 20 should remain with their parents as much as possible."

24. Another form of partial removal suggested is that the colleges and laboratories should remain in Calcutta, but that the residences and hostels should be removed to the suburbs where playing-fields could be provided ; and it is urged by some that the conditions of life would be healthier than in the city. This suggestion is made, amongst others, by Mr. A. C. Chatterjee, who would agree to the removal of the University as a whole 'if funds were unlimited ;' but as he thinks that the University should not be removed more than six miles from College Street, and as land within that radius is already 'exceedingly dear,' he would leave the nucleus of the University where it is, and convert the area around it into a university quarter. To provide means of recreation, he suggests that land for playing-fields should be acquired in the suburbs to the east of the University and should be connected with it by electric trams. Mr. A. H. Harley and Khan Bahadur Aminul Islam in a joint answer object to the removal of the University as a whole, but recommend it for any college which cannot provide its students with proper facilities for recreation.

25. A protest against partial removal is made by Rai Bahadur Nisi Kanta Ghosh, on the ground that any such separation would be injurious to the corporate life of the University. He considers that, as all the colleges would not consent to remove,

the scheme would be undesirable even if financially practicable. Mr. Arthur Brown objects to either whole or partial removal and asserts that the latter "would destroy the chance of Calcutta developing along academic lines." A more fundamental scheme of partial removal is based on the division of Calcutta University into two universities, one of which would remain in the city while the other would be established as a predominantly residential and teaching university outside Calcutta. Mr. R. N. Gilchrist proposes that the present university buildings should be given to a State university, and that a new suburban university should be established at Alipore or Belgachia, whither some of the colleges should also go. He thinks, however, that the missionary colleges would not move from the city, and that 'their loss would be deadly'; though he describes the scheme as 'very desirable' he does not see how it could be financed. Mr. Benoy Kumar Sen recommends a new teaching university in the suburbs provided that the older university continues to perform its functions of supervising the colleges and conducting the examinations.

26. The proposal for the removal of the University, in whole or in part, has, as we have seen, many authoritative and warm supporters. But the opponents of the scheme are numerous and some of them are uncompromising in their hostility. Thus Mr. Prasanta Chandra Mahalanobis says, "I do not believe a greater mistake than this can ever be committed", and asserts that its effect on the University would be 'highly injurious.' Mr. Provash Chunder Mitter does not think the removal financially possible and says, "it will mean such a reckless waste of large sums already sunk and such a dislocation of existing conditions that the results will be almost disastrous." Mr. G. C. Bose, Principal of the Bangabasi College, dismisses the proposal as "beyond the range of practical politics at least for some time to come."

27. The arguments against removal are clearly summarised by Mr. Umes Chandra Haldar in the following answer:—

"(1) The removal will deprive the students of the special opportunities offered for civic education by the exigencies of town life.

(2) The removal will be detrimental to the formation and growth of national character the foundations of which are laid in town life.

(3) The removal will involve unnecessary hardship and expense on the part of poor students and those living with their parents or guardians, who will be compelled to live in the hostel.

(4) The ends mentioned....may be achieved by acquiring land ~~now~~ at the present site of the University and erecting suitable buildings there.
— (5) Modern universities have been established and are flourishing in big towns in America, Europe, Japan and China."

28. Many witnesses urge that as the removal of the University would involve the loss of the intellectual stimulus of the metropolis, it is educationally undesirable. These witnesses hold that the training of students in a great city fits them better for service as citizens than in the academic seclusion of a rural university. "Happy as quiet university hostel life may be," says Sir Gooroo Dass Banerjee, "it is insufficient training for the world outside the college walls," and he especially mentions the desirability of the "mingling of hostel boarders with even a handful of home-living students who serve as a salutary leaven." "Academic seclusion," says Mr. Jaygopal Banerjee, "is not an unmixed good—is not without its special danger on social perceptions and interests which are claiming greater and greater attention from qualified educationists of to-day." The students of the suburban university, predicts Mr. Sudhansukumar Banerjee, would be "a batch of theoretical people entirely inexperienced in the mode of life." According to Mr. Mohini Mohan Bhattacharjee "monkish seclusion does not build up character" and "universities are not meant for the production of scholars only, but also for the preparation of men who will be leaders of public opinion." "A separate university area, buildings, teachers, and students living together near one another—these," says Mr. Ramananda Chatterjee, "constitute the mere skeleton of a university. The real thing is the life, the spirit animating this body;" and he has little faith that the development of such a life would be quickened by removal of the University as a whole to the suburbs, though he would be willing to place there a residential teaching institution, teaching up to the highest standards, for those who can afford to pay for it. "That a total dissociation from civic life is not desirable" is the first of the six reasons which Mr. Haridas Bhattacharyya gives as the basis of his emphatic opposition to the removal:

29. The argument for removal based on the desirability of strengthening the corporate life of the University is in many answers dismissed as of little value. "The growth of a real corporate university life in India," says Mr. Govinda Chandra Bhowal, "is not possible. Diversity of castes and creeds is a great obstacle in the

way. The growth of a corporate university life with teachers of foreign nationality is, generally speaking, a mere dream." "Caste prejudices," says Mr. Panchanan Majumdar, "will hamper the growth of corporate university life," and he objects to the removal as the loss of the home influence would have "a bad effect upon the character of the students." The Bengal Landholders' Association reply "we are decidedly of opinion that it will be sheer wastefulness on our part, if we fritter away our scanty resources in securing the growth of a corporate university life. Besides, it is easily possible to lay excessive emphasis upon this corporate university life."

30. The view that the removal of the University would be beneficial to the health of the students is rejected by most of our correspondents who have referred to that aspect of the question. "Calcutta on the whole," says Mr. Jaygopal Banerjee "is far and away more healthy all the year round than any other place on the Lower Bengal plains;" and Mr. Surendranath Das Gupta adds that "the health of Calcutta is generally much better than any of its suburbs which are generally malarious."

31. A plea for the special consideration of the poor students is raised, amongst others, by Sir P. C. Ray who points out that many of them have to earn their livelihood by private tuition and that a student living in a suburban university would be deprived of this source of income. Mr. Jites Chandra Guha objects to the removal of the University, on the ground that it "would cause immense hardship to poor students whose number is legion." Mr. Haridas Bhattacharyya also begs for consideration of the poor students who now earn their livelihood while attending the University and would find this impossible if they had to live in a suburb. Mr. Sites Chandra Kar, who thinks the removal of the University and the colleges to the suburbs "is worth serious consideration," would endeavour to obviate the difficulty by allowing the students to live in Calcutta and providing cheap trams for the daily journey out to the University. It is right to add, that he does not approve of an 'out-and-out residential university.' "The peculiar conditions of our social life and the general poverty of a large class of our students would impose tremendous hardship on them if residence is insisted on in every case." Mahamahopadhyaya Kaliprasanna Bhattacharyya urges that

under residential conditions the cost of the university ^{com} would be greater to many of the students, because they would ^{not} be able to live with their guardians.

32. Mr. E. Vredenburg emphasises the value of home influences on the students. He objects to the removal of the University because it would deprive numerous students "of the most priceless of blessings—family life." Sir Nitulanil Sircar urges the same objection; he says "we all know how very benign this parental influence is. I would, however, welcome the establishment of a large residential college in the suburbs." A method of combining the advantages of retaining home influences for the Calcutta students with those of suburban residence for those who come from the mufassal is proposed by Rai Kumudini Kanta Banerjee Bahadur; by his plan some colleges would remain in the city while others would be moved to the suburbs, and most of the mufassal ~~students~~ should join the latter.

33. On the question of expense opinions are divided. Sir Rash Behary Ghose thinks the "Government will be expected to provide liberally" for the removal, which "should be carried out at once, if funds permit;" and Mr. M. A. N. Hydari urges that the removal "would be really an economy for the sites where the existing colleges happen to be located must be very valuable and can be sold without any loss." On the other hand, the financial objections are regarded by many witnesses as insuperable. Sir P. S. Sivaswamy Aiyer says that without 'unlimited funds' it is not worth while discussing this question. Mr. Satyendra Nath Basu recognises the advantages but considers that they would be purchased at too great a cost. The Indian Association says "the idea is good, but the outlay would be enormous and perhaps prohibitive." The Maharajadhiraja Bahadur of Burdwan, though he sympathises with the proposal, thinks the cost may be prohibitive. Mr. Biraj Mohan Majumdar would welcome the step in the interests of the health and morals of the students but he concludes "when we think of the financial resources to carry on such a scheme—it is reduced to nothing but a dream." The Maharajah of Kasimbazar regards the expenditure which would be incurred as 'disproportionate to the advantages anticipated,' especially as the University would lose by its "isolation from the currents of social

nd civic life." Rai Debender Chunder Ghose Bahadur, thinks he scheme would have been admirable 60 years ago but that it is low financially and economically impracticable. Mr. Ramananda Chatterjee in a detailed discussion of the general question says the cost would be enormous and prohibitive and that the existing buildings "would have to be sold very cheap. Would this waste of money be justifiable?" Dr. Nares Chandra Sen Gupta also holds that the money spent in removal could be more profitably spent on teaching and in providing residences, and he dismisses the proposal as 'a counsel of perfection.'

34. The aggregation of the university buildings and colleges around College Square has already proceeded so far as to make that part of Calcutta a university quarter; and several correspondents urge that this process should be encouraged.

"College Square," writes Dr. Brajendranath Seal, "with the reclamation of land for college and hostel sites on the same plan as that of the City Extension and Improvement Trust, may be converted into an academic quarter in the heart of the city, which will provide full scope for corporate university life, as well as space for new colleges and residences for students and teachers alike. The sub-centres in Cornwallis Square, Amherst Street and Lower Circular Road have already an academic air which may be preserved from intrusion, and are in the nature of two wings to the East and the North within an easily manageable distance from the main centre."

Mr. Rajanikanta Guha, after enumerating the educational institutions around the University, urges that if the closer concentration of the colleges around the University be regarded as indispensable "the most feasible plan would be to acquire sites for them in the area bounded on the north by the Machuabazar Street, on the east by the Circular Road, and on the south by the Bowbazar Street." He points out that, as the Medical College could not be removed, the removal could only be partial; and this would defeat its purpose of fostering the growth of corporate university life. Mr. Meghnad Saha and Mr. Suniti Kumar Chatterjee also both recommend the acquisition of land for university extensions and concentration around the present university areas.

35. The concentration of the University around one site is admittedly difficult owing to its great size and its large number of students, and a policy of dispersion has much to recommend it as a means of preventing the overcrowding of students in Calcutta. Thus Mr. W. C. Wordsworth, who is not in favour of the removal of the whole University, would trust to the growth of mufassal

colleges to reduce the over-pressure on Calcutta. He recommends that the colleges which remain in Calcutta should be as far as possible removed from cramped and noisy sites ; but he says that the result of the removal of the whole University with its colleges "would be the detachment of higher education from the general life of the province, an arrangement that would make strongly for artificiality. I prefer to contemplate colleges in numerous localities, feeling themselves in touch with local needs and aspirations." Mr. Ramesh Chandra Majumdar also thinks that the money that would be expended on the removal of the University would "be more profitably employed in establishing more colleges." This view is emphatically expressed by Mr. Devaprasad Ghosh, who urges that the remedy for the congestion in Calcutta lies "in building (and in encouraging the creation of) colleges and still more colleges in the mufassal, the Calcutta University still remaining of the federal type."

36. Even if the difficulties of removing the University were all surmounted, and the objections waived or overridden, it is predicted by some of our witnesses that this step would not be final, as the demand for university education in Calcutta would lead to the re-establishment of a university within the city. "Were the University transported to-morrow," predicts Mr. Patrick Geddes, "a new university would necessarily arise, as is natural to every great city." Mr. C. H. Bompas says that Calcutta will 'always remain the seat of a university' and he recommends, in order to reduce its size, the foundation of sister universities in the other parts of Bengal. He would not remove the University to the suburbs but would build in them any new colleges that may be required ; and he insists that if the University is to be removed from the city it should be removed 'at least 100 miles from Calcutta.' Rai Mahendra Chandra Mitra Bahadur, suggests that a suitable site could be found "within 50 miles or even some smaller distance from Calcutta." Mr. Radhakamal Mukerjee, who holds that the University has "created around it a zone of college-going population," concludes as follows :—

"The largest and wealthiest centre of population in India cannot remain unprovided with facilities for higher education, and even if the present colleges and the centralised University are removed to the suburbs, there will be an inevitable tendency for new colleges to be established which will be bound to flourish at the expense of the University in the suburbs that

will stagnate in the shade of intellectual and civic isolation. In the struggle for survival among universities, the civic university in the heart of the city developing a civic personality will prosper more than a hermit university which lives in the suburbs to 'protect' its classical culture from the throbbing life of the multitude."